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NEWS SUMMARY

GENERAL

Silver medals for Britons

Philip Hubble and the women's medley relay team won silver medals for Britain in Olympic swimming events on the Moscow Games' first day of competition. But they said they were sorry they had collected their awards without the Union Jack flying.

East German Barbara Kraus was first to break a world record—in the 100 metres women's free-style swim.

Yachtsmen from six Western nations refused to fly their national flags in protest at the Soviet invasion of Afghanistan. And seven Western airlines protested at the mid-air diversion of flights into Moscow during the opening ceremony. Page 2 and 9

Arms debate

An unprecedented number of resolutions opposing nuclear weapons have been submitted to this year's Labour Party conference. Back Page

Plotters executed

Five men were executed by firing squad in Tehran after being found guilty of plotting against the Government. In Paris, five men were charged with the attempted murder of former Iranian Premier Shapur Bakhtiar. Page 2

Libyan jet crash

Italy said the aircraft which crashed into a Calabrian mountain on Friday was a Soviet-built MIG 23, bearing Libyan markings. The dead pilot carried no identification.

New premier

Lebanon President Elias Sarkis appointed Mr. Takieddine Solh, 71, as Prime Minister. Mr. Solh said he would begin talks today on the make-up of his cabinet. Page 2

M-crash death

Nine year old boy died and 16 people were injured when a coach carrying day trippers collided with the central reservation on the M62 in West Yorkshire.

Island freedom

Britain and France are to grant independence to the New Hebrides on July 30 as planned, in spite of the rebellion on the island of Espiritu Santo. Page 2

Soldier shot dead

Off-duty soldier Christopher Watson, home on compassionate leave to visit his wife who had just lost a baby, was shot dead by gunmen in a Londonderry pub.

President flees

Bolivia's coup leaders moved to crush any resistance after ousted President Lidia Gueiler took asylum in the Vatican mission in La Paz.

Watson wins

Tom Watson won the 109th British Open Golf Championship at Muirfield for the third time. Fellow American Lee Trevino was second, four strokes behind. Page 9

Cover price

Company wants to build a communal nuclear bomb shelter under a Buckinghamshire farm and to offer places at £5,000 a head.

Briefly . . .

Premium Bond prize winners are: £100,000—7MK 325553; £50,000—14YZ 554468, and £25,000—6TW 688814.

Netherlands' Joop Zoetemelk won the 67th Tour de France.

BUSINESS

Warning on state of Greek economy

● THE ECONOMY of Greece, which is to join the EEC in six months' time, faces stagnation and a rising level of unemployment according to a report by the Paris-based OECD. Greek economic policy is also criticised in another report by the International Monetary Fund. Back Page

● BL CARS has announced that 6,000 workers making Rover and TR7 sports cars are to go on short-time working, possibly until Christmas. Back Page

● A SLIGHT improvement in the level of consumer optimism is suggested by the latest Financial Times survey of consumer confidence, which has risen to minus 27 per cent. Page 4

● ANOTHER 200 workers at Chesterfield's Glass Bulbs company are to lose their jobs. In January 100 were made redundant. Page 4

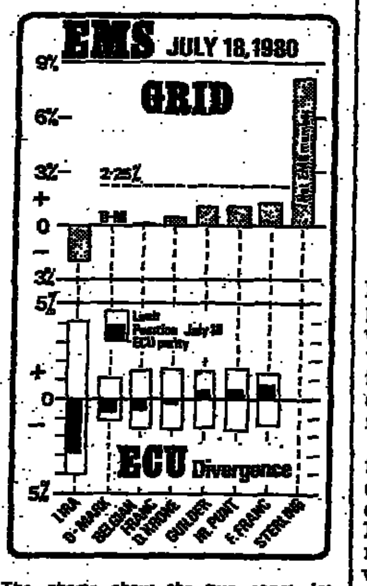
● COMMON MARKET chemical companies have accused their U.S. rivals of increasing exports of cheap products to beat anticipated European anti-dumping regulations. Back Page

● NUCLEAR POWER station construction works due to start next month at Heysham and Torness are now expected to be delayed until next year. Page 4

● TRADE UNION and Labour Party leaders will today try to agree on a joint economic strategy based on reflation and selective import controls. Page 5

● MEMOREX CORPORATION, the U.S. computer equipment maker, reported a loss of \$21.7m in the second quarter against a previous profit of \$10.6m. For the first half, its loss was \$20.6m despite increased sales. Page 16

● FRENCH FRANC lost ground against most other currencies in the European Monetary System, but remained the strongest in a quiet week's trading which saw only minor changes. The next strongest currencies were the Irish punt and Dutch guilder. The Netherlands bank rate was cut to 9 per cent on Friday from 9.5 per cent and there was also some speculation about a possible reduction in Belgium's discount rate in the near future although the Belgian franc was quite firm below the Danish krone but ahead of the D-mark. The weakest member of the system was again the Italian lira, although poor balance of payments figures announced during the week had little influence.



The charts show the two constraints on European Monetary System exchange rates. The upper grid, based on the weakest currency in the system, defines the cross rates from which no currency (except the lira) may move more than 2¼ per cent. The lower chart gives each currency's divergence from its "central rate" against the European Currency Unit (ECU), itself a basket of European currencies.

CONTENTS

For latest Share Index 'phone 01-246 8026

Telephone supply monopoly to be curbed

BY JASON CRISP

THE POST OFFICE is to lose much of its telecommunications monopoly although private companies will still be prevented from competing with the basic network. It will also be encouraged to compete in the supply of equipment and new services and may enter joint-ventures with private companies.

The biggest initial relaxation will end the Post Office's traditional monopoly to supply and maintain all telephone equipment attached to the public network, although it will still provide the first telephone in each household or business place.

Sir Keith Joseph, Secretary of State for Industry, is expected today to announce the proposals for legislation to be introduced in autumn, splitting the Post Office into posts and telecommunications. The proposals will allow private companies to compete with the Post Office to supply telephones, private exchanges and other telecommunications equipment.

British telecommunications manufacturers are likely to welcome proposals for the Department of Industry to license the telecommunications equipment which may be sold, as it will give them time to catch up with foreign competitors.

Restrictions are planned to prevent foreign manufacturers swamping the market or allowing companies to damage the network by connecting poor equipment to it.

Any manufacturer wishing to sell telephone equipment will have it licensed by the DoI. The major considerations will be: ability to service and maintain installed equipment, the amount of manufacture or assembly to be done in the UK, and—for foreign companies—the accessibility of their home telecommunications market to British manufacturers.

This is likely to mean U.S. and Canadian companies would be eligible, because of the more industrialised North American market, but the Japanese would not.

GEC, Standard Telephones and Cables (a UK subsidiary of the U.S.-owned ITT) and Plessey, the traditional main suppliers to the Post Office, are believed to have been particularly concerned that a sudden lifting of the monopoly would open a floodgate to imports, particularly from the Far East.

Suppliers will also have to have equipment approved by a new technical standards body, possibly part of the British Standards Institute. At present the Post Office itself approves equipment.

The Government is also expected to allow a small initial relaxation of the monopoly in providing extra services over the network such as data-processing services, facsimile transmission and data-bank services. Here the Department of Industry is moving cautiously, as it wants to ensure the Post Office does not lose to private companies "creaming off" the profitable parts of the network.

On the other hand, if companies want to provide a new service which the Post Office cannot offer, they are more likely to meet with departmental approval.

At first any relaxation in these "value added services" would have little significance, but it is likely to become a major consideration later in the decade as the amount of information transmitted electronically between offices increases rapidly.

The Government is also expected to retain the discretion to allow large companies to set up microwave links or even to use satellite communication. Again the criterion is whether it will damage the Post Office's existing telecommunications business.

● The Telecommunications Users Association yesterday called on Sir Keith Joseph to float part of the telecommunications side of the Post Office on the stock market and to allow it to raise loan capital freely in the market.

Government favours sale of BNOC bonds

BY MARTIN DICKSON, ENERGY CORRESPONDENT

A SALE of bonds rather than shares has emerged as the Government's preferred method of involving the private investor in the British National Oil Corporation (BNOC), although there remains some possibility of a minor equity sale.

Details of the Government's long-awaited plan to restructure the state-owned corporation are about to be debated by the Cabinet's main economic committee; and an announcement could be made before the parliamentary recesses in early August.

Although no final decisions have yet been taken, the main thrust of the Government's plan is expected to be a sale of revenue bonds which could total £500m or more.

These bonds would rise in value in line with BNOC's prosperity, rather than bearing fixed interest. They could be bought through banks or post offices.

Mr. David Howell, the Energy Secretary, had argued that a sale of equity should provide the main vehicle for privatisation. This would mean splitting of BNOC into an exploration and production company, involving private capital, and an oil trading undertaking retained completely in state hands.

There were indications in Whitehall last night that an equity offer was not completely ruled out; but the Government seems to feel that a major sale of BNOC shares would provoke too virulent a political row.

The BNOC management has itself made clear that it is strongly against being split in two, and would prefer to remain a fully integrated state-owned entity, with privatisation solved by a bond issue. The Labour Party has strongly opposed a sale of shares, and pledged itself to renationalisation.

However, the Government could face anger from its own Right wing if it limits privatisation to a sale of bonds—a course of action which would also remove the need to split BNOC formally into two. Right-wing pressure is one of the factors which is keeping alive the possibility of an equity sale.

BNOC is on its way to becoming Britain's most profitable nationalised industry. Its pre-tax profit of £75m in 1979 is expected to rise to over £1bn annually by the mid-1980s. Although a sale of shares would raise a lump sum for the Treasury, the Exchequer would thereby lose a large slice of these profits.

More strikes start in Poland

BY CHRISTOPHER BOBINSKI IN WARSAW

NEW STRIKES for increased pay broke out in Poland at the weekend. Employees stopped work at the Huta Stalowa Wola factory in the south-east of the country, according to reports reaching Warsaw.

The factory employs more than 10,000 men and produces construction machinery in close co-operation with International Harvester, the U.S. machinery manufacturer. Another strike was reported on Saturday at nearby Krasnik, in a modern ball-bearing plant.

But the public transport, delivery-men and railway workers' strike which paralysed the eastern town of Lublin on Friday ended by Saturday night.

Last week a wave of stoppages swept through small-scale industries and the service sector, including nurses at some hospitals in Lublin. Troops were brought in to make essential deliveries.

Lublin, inhabited by about 300,000 people, is about 100 kilometres from the Soviet border.

The situation led the authorities to warn the population of this town, of Soviet sensibilities on the eve of the Olympic Games.

A Communist Party Poltiburo statement at the weekend published only in Lublin, said the

Continued on Back Page

Plea for aid to steel foundries

BY ARTHUR SMITH, MIDLANDS CORRESPONDENT

THE UK steel foundry industry is calling for aid from the Government and the European Commission to help fund redundancies and rationalisation.

Up to 6,000 of the 16,000 jobs in the industry may go by the mid-1980s, the Economic Development Committee for the foundry sector says in a letter to be sent to Sir Keith Joseph, the Industry Secretary.

The committee stresses that a healthy steel foundry sector is basic to the rest of British manufacturing industry. "Market forces" could seriously damage the industry's capability to meet demand.

In addition to the 4,000 jobs lost in the last two years, another 6,000 might have to go. Production might have to be cut by 50,000 tonnes from the present level of up to 200,000 tonnes a year.

"This would mean not only a serious rundown for this basic industry itself, but a serious threat for the future to all those engineering and allied sectors to whom its service is vital," the committee said.

"It cannot be over-emphasised that the rest of British manufacturing industry will continue to need a steel castings facility with adequate capacity and a base healthy enough to produce efficiently now but also to expand from when the demands of a recovering economy call for expansion."

Foundries, already in trouble because of a shortage of orders, would "use desperate measures to 'buy' volume to the grave detriment of those more healthy parts of the industry with a real future."

The committee maintains that "one of the major disincentives to rationalisation is the cost of redundancy to companies already on the way to failure."

Accordingly, a "compensation fund" is recommended to which the Government would contribute and which might qualify for matching funds from the European Economic Community.

In a supporting document, the Steel Castings Research and trade association argues that "conventional restructuring is now beyond the resources of the industry."

The alternative to the provision of funds to secure an orderly reconstruction was "the agonising process of bankruptcy, with company funds then probably inadequate even to meet statutory social obligations, while the remainder of the industry suffers perhaps irreparable damage in human and financial terms."

Du Cann supports MPs' pay move

By Elinor Goodman, Lobby Staff

The Government faces possible defeat in the Commons tonight over the future method of assessing MPs' pay.

Mr. Edward du Cann, the chairman of the Government's own backbenchers, has put his name to an amendment on the Government's motion on pay and pensions. If successful, it would mean that the principle of linking MPs' salaries to those of the Civil Service would be accepted.

This would make it much more difficult for the Government effectively to impose pay restraint on MPs again by asking them to make a personal sacrifice in the national interest.

The amendment, which has been signed by three other members of the 1922 executive and is therefore likely to be supported by other Tory MPs would also lead to an increase in members' pensions.

The amendment has been put down by Mr. Fred Willey, the chairman of the Parliamentary Labour Party, who has been working closely with Mr. du Cann on the whole question of MPs' pay and conditions. It is backed by a number of Shadow Cabinet Members.

The vote is theoretically free on both sides of the House but, in practice, the pressure will be on Tory MPs to fall in line. Given its sponsors, the amendment, if called, must stand a good chance of getting through, the question of their pay divides MPs in both parties. Ministers are expected to decide this morning how to respond.

Tonight's vote is the final stage in the Government's long-drawn-out dilemma over MP's pay. Earlier this month, it was decided that MPs, together with senior civil servants, should be asked to accept smaller increases than those recommended by Lord Boyle's Top Salaries Review Board.

Despite some annoyance on the Conservative backbenches about the request to accept less than recommended for the second year running, the signs are that most are prepared to accept this reduction in the short term. But Mr. du Cann, and other members of the executive, have argued with Ministers that this situation must not be repeated.

Prior may call for ballot on closed shops

BY PHILIP BASSETT, LABOUR STAFF

THE GOVERNMENT is considering making a recommendation that the principle of a ballot on the establishment of new closed shops be extended to closed agreements presently in force in Britain.

The recommendation that existing closed shops, which at present cover at least 5.2m workers in Britain, be subjected to periodic review by ballot is expected to be made in a draft code of practice which the Government intends to issue for consultation when the Employment Bill becomes law.

Officials were keen to stress yesterday that there would be no element of compulsion in the proposal.

The new notion, though, will incense still further the trade unions, already angry at the disclosure at the weekend that in another code of practice, the Government is likely to recommend that the number of workers on a picket line be limited to six.

In an early response to the closed shop proposal, Mr. David Basnett, general secretary of the General and Municipal Workers' Union, and a senior TUC figure, said that it would "destablise" industrial relations and could only create confusion.

At present there is understood to be no specific figure in the new code laying down the frequency of the review of workforce support for existing closed shops, though the periods of two or three years have been under consideration by the Department of Employment.

Under the terms of the Employment Bill, which is expected to become law at the end of the month or the beginning of August, new closed shops could not be established without first being put to a ballot of the workforce, which would then have to show at least 80 per cent in favour.

The code seems likely to adopt similar terms, though unlike the forthcoming Act it would not be legally enforceable. It could be used, though, in any industrial tribunal or court proceedings which might result from a closed shop agreement.

Employment Ministers see the proposals as doing nothing more than embodying the highest standards already in force in the best union membership agreements.

The first public indication of the Government's thinking was given yesterday by Mr. James Prior, Employment Secretary, in the same television programme, Granada's "Union Power," in which he disclosed the proposals restricting the number of pickets.

Continued on Back Page

Switch to deposits hits bank results

BY MICHAEL LAFFERTY, BANKING CORRESPONDENT

INTERIM RESULTS of all the big clearing banks have been hit by a sudden, unexpected change in bank customer habits. Customers have been showing greater awareness of higher interest rates by placing substantially more money on interest-bearing deposit account than many bankers and analysts expected.

As a result, clearing banks have benefited less from higher interest rates than had been expected initially.

Lloyds Bank, first of the big four clearers to announce its 1980 interim results, said on Friday that it had experienced no growth in current account volume in the period, though balances on seven-day account had increased significantly. Mr. Norman Jones, the bank's chief executive, said this was the main reason why results were substantially below analysts' expectations.

Two other clearing banks confirmed that their experience is broadly in line with that of Lloyds, and one has said that stock markets analysts still need to adjust their forecasts to take thi factor into account as far as its results are concerned.

The change in banking habits is confirmed by Bank of England figures for money-supply growth. These show that in the period between mid-November, 1979, and mid-June this year non-interest-bearing bank deposits by the UK private sector fell by £803m, or 5 per cent seasonalyl adjusted.

OVERSEAS NEWS

Mr. Yassir Arafat

PLO chief tours Games site

By David Satter in Moscow

COMPETITIONS began yesterday i nthe 22nd Olympiad. But political considerations continued to affect the atmosphere of the games as the Soviet authorities allowed Mr. Yassir Arafat, the leader of the Palestine Liberation Organisation, to be given a tour of the Olympic Village.

The competition started in 14 of the 21 olympic sports, including swimming, where the boycott by U.S. athletes has undermined the competition, cycling, boxing, wrestling, weightlifting, hockey, shooting and basketball. Other competitions which started were modern pentathlon, football, handball, gymnastics, rowing and volleyball.

The appearance of Mr. Arafat at the Olympic Village, however, indicated that although the Soviet authorities objected to the U.S. led boycott as political interference with sport, they may make further efforts to use the games for political purposes of their own.

Mr. Arafat, who enjoys strong Soviet support, was reportedly in Moscow to seek increased arms deliveries. His appearance at the Village, including the residential area, which is off-limits to all but specially cleared persons, was apparently indicated to demonstrate that the 1972 attack by Palestinian guerrillas in Munich in which 11 Israeli athletes died, did not reflect Palestinian objections to international sport. Israel is boycotting the Moscow Olympics.

The PLO never condemned the 1972 attack on the Olympic Village in Munich, which was carried out by the Black September group, an affiliated organisation.

EEC FOREIGN MINISTERS MEET

Discord over Mideast mission

BY JOHN WYLES IN BRUSSELS

EEC FOREIGN Ministers will try tomorrow to resolve some sharp differences which may delay the formal launch of the Community's fact-finding mission to the Middle East to be led by M. Gaston Thorn, the Luxembourg Foreign Minister and President of the Council of Ministers.

The mission idea was adopted by the EEC summit in Venice last month as a tailpiece to its controversial declaration on the need for a comprehensive Middle East peace settlement. But it has proved more difficult than expected for the Nine to settle some basic questions on the substance and procedures of the Thorn mission and it is thought here that they may not be resolved before the middle of August.

The practical effects of failing to finalise the mission's mandate tomorrow may not be very significant because it would not in any case be making any visits to the Middle East until after the end of Ramadan on August 12.

But Community Foreign Ministers will have to make some progress at removing disagreements which emerged at official level last week if they are to avoid embarrassing the EEC's initiative in its earliest stages.

Diplomats here are reluctant to reveal details but it appears that the difficulties centre on the level at which contacts should be made with Middle East Governments, on how to maintain a balance in discussions with the area's hawks and doves in relation to Israel and on how to treat the Palestine Liberation Organisation (PLO).

It is understood that Holland and West Germany are uneasy about holding discussions with the top PLO leadership, including Mr. Yassir Arafat, the organisation's chairman, not least because of possible Israeli and U.S. disapproval.

It seems likely that M. Thorn will be accompanied and advised by officials from a number of Community countries with particular expertise on the Arab-Israeli problem. The British Foreign Office is expected to be heavily represented.

As defined in Venice, the broad aim of the mission is to establish "the position of the various parties with respect to the principles" set out in the EEC declaration. The Nine hope that the contacts could pave the way for an effective European initiative, probably at the UN, which would broaden the current Camp David talks into comprehensive Middle East peace negotiations.

If their discussions become prolonged, the Foreign Ministers will be pushed to complete a very crowded agenda which also embraces accession negotiations with Spain and Portugal, trade relations with the U.S. and Japan, the future of the EEC's anti-crisis measures for the steel industry, and the proposed regulations to implement the agreement reducing the UK's budget contributions.

Ministers must also prepare the Community's position for the special UN assembly starting on August 25 aimed at re-launching the North-South dialogue on the basis of global negotiations. Such are the complexities and the need for flexibility that the Commission is recommending a special meeting of the Council of Ministers in New York the day before the special assembly convenes.

NEW PREMIER FOR LEBANON

Syria keen for Solh to succeed

BY IHSAN HIJAZI IN BEIRUT

PRESIDENT Elias Sarkis yesterday asked 71-year-old Takieddin Solh to form a new Lebanese Cabinet to replace the Government of the outgoing Prime Minister, Dr. Selim al Hoss.

Mr. Solh, a veteran politician and one of the fathers of the country's independence, in his first statement after he was given the task, called on all Lebanese to help deliver their country from its present political impasse.

Mr. Sarkis had decided to move full force on forming a new Government in order to check a serious deterioration in the general situation following the Christian fighting on July 7.

Several hundred people were reported killed when the Phalange party, Lebanon's principal paramilitary organisation, suppressed its main rival faction, the National Liberal Party of ex-president Camille Chamoun.

The development generated fears that Lebanon was on the brink of another civil war.

Mr. Solh, who headed a Government of national reconciliation in 1973 and 1974, said he would begin his consultations to form a new Cabinet today.

Informed political observers said President Sarkis had prepared a list of the Cabinet members he wanted. The list reportedly includes representatives from the various factions, left and right, such as Walid Jumblat, leader of the leftist National Movement, deputy Amin Gemayel from the Phalange Party and Dany Chamoun from the National Liberal Party.

On Saturday leaders in the National Movement informed President Sarkis of their readiness to join a Cabinet with the Phalangists, provided the main objective of the new government would be to secure national entente.

The leaders took the step after a visit to Damascus which generated speculations that Syria was eager to help President Sarkis check the rising tension in Lebanon.

Observers say Damascus wants to see the crisis in Lebanon frozen so Syria may devote its energies to combating the Moslem Brotherhood inside Syria.

President Sarkis

Syria, moreover, is currently preoccupied with preparations for setting up a stronger relationship with Moscow.

Persuading former President Suleiman Franjieh to have his followers in the same Cabinet as the Phalangists may prove to be the main problem facing the President and the Premier-designate.

Not even Syria, a close ally of Mr. Franjieh's, has been able to convince him to back such a Cabinet. The ex-President has been locked in a bloody feud with the Phalange Party since the latter's militia murdered his eldest son two years ago.

Dany Chamoun, outgoing commander of the National Liberal Party, may also be reluctant to join the new Cabinet, but the party would probably nominate another candidate.

President Sarkis was reported to have already decided to assign the three main portfolios in the new Cabinet to three of his closest advisers—Mr. Fuad Butros for the Foreign Ministry, army commander Major General Victor Khoury for the Ministry of Defense and gendarmerie and police chief Major General Ahmed al Hajj for the Ministry of Interior.

Under the Lebanese system, the head of Government is always a Sunni Moslem, while the President is a Maronite Christian and the Speaker in Parliament a Moslem Shi'ite.

Generally known as "Taky Bey," Mr. Solh is a moderate politician who is not a member of Parliament.

Plan to limit bank holdings in W. Germany

By Kevin Done in Frankfurt

WEST GERMAN banks' far-reaching equity holdings in German industry should be substantially reduced according to the draft amendments for a new West German Banking Law produced by the Federal Finance Ministry.

Among other important changes, the Finance Ministry is suggesting that German banks should be forced to produce a consolidated balance sheet including all their foreign as well as domestic interests.

This would allow the banking authorities for the first time to make a more rigorous assessment of the risks German banks are taking on the Euro-markets and in particular in lending to certain high-risk countries.

At present German banks can avoid domestic restrictions by conducting their Euro-market business through foreign subsidiaries in leading financial centres such as Luxembourg.

The changes recommended by the Finance Ministry study paper have been made as part of the preparation for a new Banking Law planned for debate during the next legislative period of the Bundestag, the West German lower House.

The draft picks up and strengthens several suggestions of the Gessler Commission which was set up to study possible reforms of the West German banking system in the wake of the crash of the Herstatt Bank in 1974.

It suggests that a bank's industrial holdings should be reduced to no more than a 10 per cent interest in individual companies, although it would allow some eight to ten years for the banks to make any necessary disposals.

Our Frankfurt correspondent adds: Despite clear signs that economic activity in West Germany is beginning to slow down, the Bundesbank, the West German Central Bank, appears unlikely to relax its record interest levels before the late summer.

The last meeting of the Central Bank Council before its four-week summer break takes place this Thursday. Dealers in the financial markets here suggest that the Bundesbank could decide then to lower the level of minimum reserves that must be held by the banks, thus increasing bank liquidity.

Herr Karl Otto Pöhl, president of the Bundesbank, stressed yesterday that a major factor remained the need to attract foreign capital into the Federal Republic to help finance the deficit in the current account of the balance of payments, which the Bundesbank now expects to jump to around DM 25bn this year, compared with a deficit of only DM 10bn in 1979.

Five shot after Iran begins coup trials in secret

BY PATRICK COCKBURN IN TEHRAN AND SIMON HENDERSON IN LONDON

FIVE leaders of the military conspiracy against the regime of Ayatollah Khomeini, Iran's revolutionary leader, were executed yesterday. One was a former post-revolutionary head of the Gendarmerie, the others were air force officers.

At least 500 people are still under arrest and further executions are likely following a call from Ayatollah Khomeini for the death penalty for anybody involved in the attempted coup d'etat. "No one has the right to pardon any of them," he said.

Those executed were shot by firing squad after a secret trial lasting 16 hours. The attempted coup is said to have planned to return to power, Dr. Jhahpour Bakhtiar, the last premier appointed by the Shah, who escaped unhurt during an assassination attempt against him in Paris last Friday.

French police have arrested two more men who are believed to have taken part in the assassination plot. Three had been arrested on Friday after a gun battle with police guarding Dr. Bakhtiar's flat.

French radio has reported that the leader of the attackers has confessed that he was acting on orders from the revolutionary authorities in Tehran, but at a Press conference yesterday the public prosecutor handling the case refused to confirm or deny the reports.

Other Press reports have indicated that the attackers were Palestinians. On Friday Tehran Radio had carried a statement from a previously unknown group, the Guardians of Islam, claiming responsibility.

Any Iranian connection has been emphatically denied by Mr. Sadeq Qotbzadeh, the Foreign Minister, who claimed in Paris at the weekend that his Government had information the attackers were from a pro-Shah group.

Mr. Shahpour Bakhtiar escapes assassination

Meanwhile, the ruling Revolutionary Council has been theoretically dissolved. After spending seven weeks on organisational matters the newly-elected Parliament has now assumed full legislative functions.

Among its first tasks will be to approve a Prime Minister and Cabinet. President Bani-Sadr is expected to put forward Mr. Hassan Habibi, the Minister of Culture and Higher Education, who has generally occupied a moderate position in the rivalry between the hardline Islamic Republican Party, which dominates the Parliament, and the President.

Turkish Marxist group claims latest killing

BY METIN MUNIR IN ANKARA

THE ASSASSINATION in Istanbul on Saturday of Mr. Nihat Erim, a former prime minister of Turkey, has been claimed by a Marxist underground organisation whose leaders were killed in a clash with the army in 1971 when Mr. Erim was in office.

Mr. Erim, a soft-spoken, bespectacled politician of conservative views, had become Prime Minister that year when the army ousted Mr. Suleyman Demirel, then as now Prime Minister, for his inability to quell left-wing terrorism. He stayed Prime Minister for 13 months but was unsuccessful and resigned. For the past few years he had been living in retirement.

Mr. Nevzat Ayaz, the Governor of Istanbul, yesterday said that police had "important clues" about the murder which took place last Saturday outside a beach club near Mr. Erim's Istanbul holiday house. Mr. Erim's bodyguard was also killed.

Lonrho, Nyerere in assets move

BY OUR DAR ES SALAAM CORRESPONDENT

LONRHO Chairman Lord Duncan Sandys has held talks with President Nyerere over the future of the company's seized assets in Tanzania, it was learned yesterday.

It is understood Lord Sandys not only received reassurances from Dr. Nyerere about payment of compensation but the two, who are old friends, even discussed the possibility of Lonrho again developing what an informed source called "mutually beneficial commercial activities" here.

Dr. Nyerere and Mr. "Tiny" Rowland, Lonrho's chief executive, have been involved in a bitter dispute since the takeover of Lonrho's 18 Tanzanian companies in June 1978.

In recent months Mr. Rowland has leaked the text of letters he has sent to the Tanzania Government, accussing it of withholding the results of an audit by an independent company on the basis of which the shareholders, many of whom are in Kenya, were to have been paid.

For its part Tanzania has published commentaries in the Government press attacking Mr. Rowland. One said he used "every trick in the book" to frustrate meaningful talks on compensation.

An official Tanzanian communiqué on the talks, held last Friday at Dr. Nyerere's private beachside villa, said they were cordial and constructive and "a number of misunderstandings were clarified."

Last October the Tanzanian Parliament passed a Bill legalising the seizure of Lonrho assets

Television dispute settled

By Roger Boyes in Bonn

A MAJOR ROW over political interference in West German broadcasting has been settled with a compromise between Social Democrat (SPD)-controlled Hamburg and the two Christian Democrat states of Schleswig Holstein and Lower Saxony.

The immediate threat of a break-up of Germany's publicly controlled broadcasting system has thus been averted—but the role of politics in television broadcasting remains a highly sensitive issue in Germany, with only some three months to go before general elections.

After almost a year of political horse-trading the Prime Ministers of the three north German states which make up the Norddeutscher Rundfunk (NDR) broadcasting system, have decided to restructure NDR. The new-look system allows (but tacitly discourages) private commercial broadcasting, ensures that no Government representative sits on the NDR board and provides ground rules for politically and regionally balanced coverage.

The compromise has left all three states feeling vaguely dissatisfied, but has handed out consolation prizes to the Premiers, and makes it certain that the NDR system remains a three-state network for at least another 10 years.

Meanwhile Herr Franz Josef Strauss, Bavarian premier and Chancellor Helmut Schmidt's official election challenger, is threatening to withdraw from the ARD, the umbrella broadcasting organisation, because he claims that he is being discriminated against in political reports.

Thus Chancellor Schmidt's visit to Moscow was given extensive coverage but, as ARD executives poiont out, it would be difficult to justify giving Herr Strauss equal air time because the Bavarian leader's activities were simply not as newsworthy.

Bahrain refinery takeover

By Our Bahrain Correspondent

THE BAHRAIN Government has signed an agreement with the Bahrain Petroleum Company, a Caltex subsidiary, giving the country a 60 per cent interest in the oil company's refinery. The deal, backdated to July 1, was signed by Mr. Yousuf Shirawi, Minister of Development and Industry, and Mr. Bill Tucker, president of Caltex and a director of Bapco.

Both Saudi Arabia and Kuwait are thought to be heavily involved in financing the takeover and are expected, along with the Bahrain Government and Caltex, to be represented on the board.

Bapco said details of the actual agreement would be worked out during the next six months. No figures have been released on the cost of the takeover

Mystery over ex-President as Bolivians resist junta

BY MARY HELEN SPOONER IN SANTIAGO

THE whereabouts of Bolivia's deposed President, Sra. Lidia Gueiler, remained a mystery yesterday amid contradictory reports that she had been deported to Paraguay or had sought political asylum in the U.S. Embassy in La Paz, the Bolivian capital.

Sra. Gueiler was last seen leaving the Presidential residence in La Paz on Saturday morning in military custody. Paraguayan officials have denied that she had arrived in the country. Other reports, also unconfirmed, indicated that Sra. Gueiler had sought refuge in the U.S. Embassy or the Papal nuncio in La Paz.

Civilian resistance to the military coup, the 189th in Bolivia's history, continued in La Paz and other areas of the country yesterday. Clandestine radio stations have begun transmission urging Bolivians to "maintain a strict discipline."

The Bolivian Air Force has bombed at least one clandestine radio station in Colquiri, a town south of La Paz, killing one person and injuring another.

Reports from La Paz indicate that Sr. Marcelo Quiroga, the Socialist Party presidential candidate who came fourth in the June 29 election, and Sr. Simon Reyes, a leader of Bolivia's pro-Moscow Communist Party, have died of their injuries suffered when troops raided the Bolivian Workers' Central (COB) on Thursday.

Sr. Hernan Siles Zuazo, who won the election, who was also wounded during the military takeover, is alive and in hiding and broadcasting statements via underground radio stations in Bolivia.

Independence for New Hebrides

BY ROBERT MAUTHNER IN PARIS

BRITAIN AND France have decided to grant independence to their South Pacific condominium of the New Hebrides on July 30 as scheduled, in spite of the continuing rebellion on the island of Espiritu Santo, where secessionists have taken control.

A joint statement was made at the weekend following talks in Paris between Mr. Peter Blaker, Minister of State at the Foreign Office, and his French opposite number, M. Paul Dijoud, State Secretary for Overseas Territories.

The statement said that a joint Anglo-French mission to Espiritu Santo, aimed at patching up the quarrel between Mr. Jimmy Stevens, the rebel leader, and Father Walter Lini, head of the elected New Hebrides Government, had made "some progress."

"In view of the progress made and the enhanced possibility of independence taking place in unity and peace, the two Ministers decided that independence would come about on July 30, as desired by the New Hebrides Government," the statement said.

Mr. Blaker said that there were sufficient signs of willingness to negotiate for the independence deadline to be respected. But it was clear from the Anglo-French statement that much work remains to be done before a final agreement is reached. The British and French officials who have been acting as mediators are due to return to the New Hebrides to pursue their peace mission.

Mr. Blaker warned that if Espiritu Santo could not be brought back into the New Hebrides fold by independence day it would be considered as being in rebellion against the sovereign central Government.

British officials said the Royal Marine contingent sent to the New Hebrides last month would be withdrawn unless the new Government specifically asked it to stay.

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Patricia Newby in Canberra and **John Wyles** in Brussels explain the reasons behind the trade threat from Canberra

Why the lamb dispute forced Australia to draw the line

WHEN Mr. Doug Anthony, Australia's Deputy Prime Minister and Minister for Trade and Resources, threatened last week to divert up to A$1bn (£500m) in trade away from the European Economic Community, he was not bluffing—at least it would be rash to assume that he was.

Australia is certainly very angry and worried about the EEC move, announced on May 30, to include a sheepmeat regime in the Common Agricultural Policy (CAP).

Not only is there the prospect of a reduced market for Australian mutton and lamb, but the Australians fear disruption to other markets if subsidised EEC sheepmeat is offloaded as has happened with other commodities under the CAP.

With talks due to be resumed in Brussels on Wednesday when a high-level Australian delegation will meet EEC officials Canberra can be expected to take a hard line.

Australia believes subsidised EEC surpluses have usurped markets from unsubsidised producers of sugar, beef, dairy produce and flour. It is dismayed at the prospect of another subsidised commodity on world markets.

The chances of Australia retaliating if it does not receive some satisfaction in the sheepmeat negotiations are now higher than ever before. Mr. Anthony's threat to Mr. Finn Gundelach, the EEC's Agricultural Commissioner, earlier this week has been reiterated not only by Mr. Anthony but by other Cabinet ministers.

The cancellation of one or two headline-grabbing contracts such as the A$200m (£100m) deal for four European Airbuses for the Government-owned domestic airline, TAA, is being held out as a possibility.

The Government has put itself in a position where it must follow through the threat or lose credibility with both the EEC and the Australian electorate.

Mr. Anthony is adamant that the threat was not idle. "I am quite calm about it," he said. "We've got to draw the line somewhere and the sheepmeat industry is very important to Australia."

It is possible that military purchases from the EEC could be affected. Nobody expects the Government to make decisions in pique over sheepmeat that would affect Australia's defence capacity, but in the grey areas—such as joint ventures worth millions of dollars for building aircraft and destroyers in Australia—a non-EEC partner might be given preference.

Britain would be particularly vulnerable in the event of retaliation, because among the nine EEC members, it has by far the largest trade volume with Australia. Of the A$3.5bn (£1.72bn) worth of EEC goods imported last year, about half were from the UK.

Mr. Anthony said last week that although Australia appreciated the help given by some EEC countries to his country's case, it was not possible to exclude them from retaliation. "The total membership of the EEC must recognise what the consequences are," he said.

Under the proposed sheepmeat regime, the EEC wants exporting countries like New Zealand, Australia and Argentina voluntarily to limit exports in return for a lower rate of duty than the current 20 per cent.

Australia exported about 11,000 tonnes of mutton and lamb in 1979, worth about A$13m, to the EEC last year. The EEC is currently exporting about 6,000 tonnes of sheepmeat a year, but Australia fears that Community price supports will lead to surpluses which will then be sold cheaply on third markets in competition with unsubsidised commodities from local farmers.

Australia has been virtually excluded from the EEC market since the CAP was introduced in the mid-1960s and Britain's entry in 1973.

Australia's foreign, defence and trade policies, which were once heavily tied to Britain, have gradually been transformed. As Mr. Andrew Peacock, the Foreign Minister, said this week, Australia's future is firmly rooted in South-East Asia. Australians accept that for practical purposes, the old relationship with Europe is finished.

What really hurts is that Europe has not only shut off its own markets from Australia, but is disrupting inroads into the new markets in South East Asia which Australia has developed to compensate

Officials estimate that unsubsidised producers like those in Australia, have lost 200,000 tonnes of beef exports to the Middle East and Eastern Europe because they cannot compete with subsidised exporters in the EEC.

The ultimate taunt came when EEC sugar manufacturers began exporting to Papua New Guinea, at subsidised prices, undermining the exports of sugar producers in Queensland only a few hundred miles away.

The EEC's refusal to sign the International Sugar Agreement has been a bone of contention between Australia and the EEC for years. In 1975, the EEC was a net sugar importer, but with the help of subsidies its members exported an estimated 3.8m tonnes in 1979—more than Australia's entire production of 3.4m tonnes. Subsidies on dairy products, cereals and flour are effecting Australian and New Zealand exports to neighbouring economies of South-East Asia and Japan.

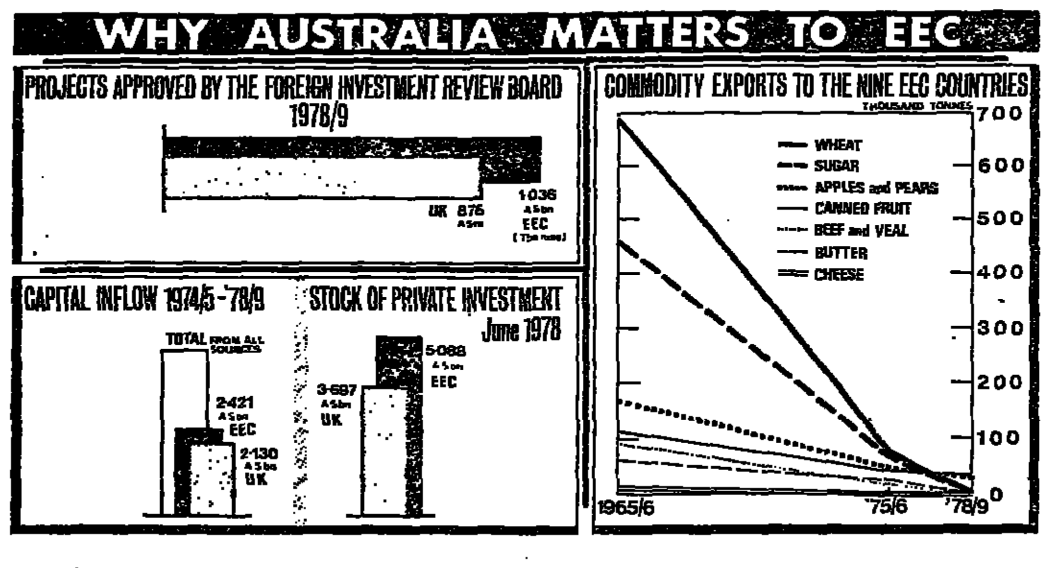
Now that sheepmeat threatens to join the list. Mr. Anthony has demanded a guarantee that there will be no subsidised sheepmeat exports.

"The EEC says it is not going to happen, but we've heard that before," he said.

"I think we've just got to start cancelling a few significant orders to make the EEC realise that what's good for the goose is good for the gander," he said.

The Europeans will have the opportunity to call Mr. Anthony's bluff this week—if that is what it it.

WHY AUSTRALIA MATTERS TO EEC



This time, it's a threat which Brussels cannot afford to ignore

AUSTRALIA'S tough tactics are deeply revealing about the difficulties and tensions in its relations with the European Community.

Senior Ministers followed up their harsh public threats of trade reprisals against the EEC with a political roughing up in Canberra for Mr. Finn Olav Gundelach which reportedly left the Community's Agriculture Commissioner shaken and angry.

But there can be no doubt that he will bring back to Brussels precisely the message which Canberra was determined to drive home: Australia is tired of its grievances being ignored by the Nine and unless there is some redress then a political and trading relationship of increasing importance to the EEC will suffer.

While there is by no means a common view among the Nine as to the justice of the Australian cause, there is a steadily growing appreciation that the Community needs better political and trading relations with the Antipodes.

Rich in the coal and uranium which the Nine will need to tap in their ambitious struggle to reduce dependence on imported oil, Australia is also a major potential market for the Community's exports.

A recent Commission paper entitled "Australia and the Community — a new relationship" underlined the point. Australia has 17 per cent of the free world's uranium reserves, is an exporter of coal and within a decade could be the non-Communist world's biggest aluminium producer.

The achievements of the last four years, which have seen a 28 per cent increase to £1.72bn in the Community's sales to Australia, could indeed be threatened by restrictive trade measures for the simple reason that most of Australia's tariffs are not bound by GATT agreements.

The Nine are irritated by Australian complaints about CAP barriers to its farm exports to the EEC, because they are made from inside a protectionist glasshouse. Average Australian tariffs on EEC manufactured goods are 16 per cent (compared to the EEC's 1 per cent on Australian goods). The Community has frequently complained that this barrier, coupled with lower priced competition from Japan, Taiwan and South Korea, is damaging its trade in some areas such as cars, footwear and textiles.

But the fervour with which such EEC members as France and Ireland protect their national interests in the CAP limits the Community's scope for agreeing concessions on Australian farm products in return for lower tariffs on European manufactured goods.

Australia has already demonstrated a limited readiness to use the trade lever by withholding formal ratification of modest concessions it made during bilateral negotiations with the Community within the GATT framework last year. Although narrow in scope, the agreement was supposed to chart a new way forward for EEC-Australia relations.

While needing both to preserve and develop its exports to Australia, the EEC also has an increasing need to buy that country's energy-related raw materials on the most favourable terms possible. Sensitive negotiations are currently under way between Euratom and the Australian Government on safeguards to be applied to the future supply of uranium and Prime Minister Fraser has hinted that these might not be insulated from a major deterioration in relations.

There are also broader political reasons for the EEC to be on good terms with Canberra. Australia and New Zealand are seen as important stabilising influences in the Pacific and Far East with an important role to play as mediators in the increasingly difficult North-South disputes now emerging.

The scope for granting Australia the "equality of trading opportunity" to sell more of its farm products into the EEC is limited by the Community's growing self sufficiency in a wide range of produce and by its preferential agreements with Mediterranean and Lomé Convention countries.

However, a major contribution to better relations would be a sensible reform of the CAP so that the Community has fewer surpluses of dairy produce, sugar and some grains to sell at subsidised prices on world markets. This is the problem which the EEC is supposed to tackle next year within the context of internal budgetary reforms.

ITC rejects Carter car plea

BY DAVID BUCHAN IN WASHINGTON

A semi-independent U.S. trade panel has so far refused to be pushed by political pressure from President Carter and a majority of Senators into speeding up its investigation into the effects of imports on the U.S. car industry.

The U.S. International Trade Commission rejected on Friday by four votes to one Mr. Carter's request for an accelerated car import ruling by September or early October. That request paralleled one made by some 51 Senators.

Normally, the ITC would have six months to consider the complaint brought by the United Auto Workers Union (UAW) in mid-June. Import penetration, especially from Japan, has risen to over a quarter of the market, and is undoubtedly a major factor in the Detroit-based industry's woes. Unemployment among UAW members now runs at 25 per cent.

The ITC evidently does not want to be rushed into a complex suit, in which the UAW is asking for a higher tariff to reduce car imports. However, the Commission said its Friday decision was not final, and other ways might be found to accommodate Mr. Carter's desire for a speedy decision.

The President has the final say on any ITC finding. He has thus far promised to help the car industry in several ways, but not by restricting imports. However, if the ITC were to make its recommendations soon, he would be in a position to order tariff relief for the domestic car industry in the run-up to the November election.

Aid measures promised by the Administration to the car industry this month include a postponement in new exhaust emission standards and credit for hard pressed car dealers.

World Economic Indicators

TRADE STATISTICS

		June '80	May '80	Apr. '80	June '79
UK £bn	Exports	4.010	3.973	3.885	3.4
	Imports	4.027	3.991	4.149	3.8
	Balance	−0.017	−0.018	−0.264	−0.4
France Fr bn	Exports	40.763	38.328	42.286	34.846
	Imports	46.580	45.558	44.330	35.987
	Balance	−5.817	−7.230	−2.044	−1.141
		May '80	Apr. '80	Mar. '80	May '79
U.S. $bn	Exports	17.678	18.468	18.534	13.862
	Imports	20.528	19.308	20.607	16.342
	Balance	−2.850	−0.840	−2.073	−2.480
Italy Lira bn	Exports	5,575	5,411	5,617	5,014
	Imports	7,088	6,921	7,001	5,716
	Balance	−1,513	−1,510	−1,384	−706
Germany DMbn	Exports	28.90	30.14	31.30	26.99
	Imports	28.60	29.04	29.30	24.99
	Balance	+0.30	+1.10	+2.00	+2.00
		Apr. '80	Mar. '80	Feb. '80	Apr. '79
Japan $bn	Exports	9.850	10.483	9.399	7.809
	Imports	10.680	10.526	9.586	7.338
	Balance	−0.830	−0.043	−0.187	+0.471
Holland Fl bn	Exports	12.550	13.315	12.557	10.044
	Imports	12.958	14.053	12.701	10.287
	Balance	−0.408	−0.738	−0.144	−0.243
		Feb. '80	Jan. '80	Dec. '79	Feb. '79
Belgium Fr bn	Exports	169.400	155.700	137.800	126.327
	Imports	185.900	181.768	152.600	128.160
	Balance	−16.500	−26.068	−14.800	−1.833

SHIPPING REPORT

Dry cargo rates easing

By William Hall, Shipping Correspondent

THE KEY U.S. Gulf/Continent grain rate appears to have stabilised at around $15 per tonne after its sharp fall over the past month. However, most other rates in the dry cargo markets have tended to ease both in the Atlantic and the Pacific over the past week.

Aside from the downturn in world trade one of the main factors behind the current weakness in the dry cargo market is the increasing number of combined oil/bulk carriers that have switched out of oil and into dry bulk to take advantage of the buoyant freight rates.

John I. Jacobs, the London shipping brokers, reports that the amount of combined carrier tonnage operating in the oil trades has fallen to 26 per cent of the total fleet — its lowest level since it first started keeping records.

At the end of January there were 197 combination vessels of 20.5m dwt in the oil trades. By the end of June the fleet had dropped to 122 combination carriers, totalling 12.2m dwt. As the total bulk carrier fleet of between 80,000 dwt and 150,000 dwt only amounts to 158 vessels totalling 17.9m dwt (Fearnley and Egers' figures) the influx of another 75 ships totalling 8.3m dwt is the equivalent of a near 50 per cent increase in the fleet.

The large increase in the number of bulk carriers of around 100,000 dwt operating in the dry bulk trades has taken it toll on freight rates for this size of vessel. According to the latest figures from the General Council of British Shipping (GCBS) there has been no growth in its tramp trip charter index for vessels of 85,000 dwt, and over, in the first half of 1980.

By contrast smaller bulk carriers in the 35,000 dwt to 50,000 dwt size group have seen their freight rates (on the basis of the GCBS index) rise by around a fifth so far this year and over the last 12 months, rates are up by some 55 per cent.

In the oil tanker markets the outlook for the larger vessels shows no sign of improvement.

UK NEWS

Delays in nuclear expansion scheme

By Martin Dickson, Energy Correspondent

CONSTRUCTION work on two nuclear power stations, scheduled to start in August, is now expected to be delayed until next year. The development is *an embarrassment* to the electricity supply industry and a setback to the Government's ambitious nuclear expansion timetable, which has already shown signs of slipping.

The new delays concern two stations of the advanced gas-cooled reactor (AGR) design, one to be built for the Central Electricity Generating Board at Heysham in Lancashire and the other for the South of Scotland Electricity Board at Torness in Scotland.

The start of construction is expected to be put back by between six and nine months because the Boards have still not completed their design and safety plans. It will be the second delay for this reason. Construction was originally intended to begin last spring, but was put back until August 25 —

The delay is embarrassing to the boards because earlier this year, when the Government was debating whether to proceed with the two AGRs, the supply industry urged that the two be built as quickly as possible.

However, the boards are anxious to ensure that the detailed design and safety plans for the stations are in order, so as to avoid the late modifications which bedevilled earlier AGR construction programmes.

The two plants are meant to be close copies of the Hinkley Point "B" station in Somerset, designed in the 1960s, but will *incorporate significant modifications*, notably extra fuel channels and an enlarged reactor diameter.

The delays could increase the cost of the stations, currently put at £1.5bn for Heysham and £1.2bn for Torness, with additional interest charges of £200m on each.

Oil and gas reserves treble in value

By Martin Dickson

THE CAPITAL value of Britain's in-place oil and gas reserves has trebled during the past year, according to stockbrokers Hoare Govett.

A doubling of oil prices over the past year has outpaced the Government's recent changes in taxation, in petroleum revenue tax, to treble the net present value of reserves, says Oilfacts, the company's quarterly bulletin.

It estimates that the net present value of large offshore oilfields (150m barrels recoverable) five years away from the start of production averages $4.30 (£1.90) a barrel.

The net present value is derived by discounting the expected cash flow stream of an oil or gas project and dividing this value by the *reserves* expected to be extracted.

CBI presses for faster regional grant payments

BY RAY PERMAN, SCOTTISH CORRESPONDENT

INCREASING DELAYS in payment of regional development grants, causing some small companies severe cash-flow problems, will this week be raised by the Confederation of British Industry at a meeting with Sir Keith Joseph, Industry Secretary.

The CBI said yesterday that it had already "protested vehemently" to the Government over the delays, and that employers' associations were concerned.

Last year the Government ordered a four-month pause in grants payment, as an economy measure. But reports from Scotland, the North-East and North-West of England, and Wales, *indicate that some applicants* wait eight months to a year for money.

Regional grants of 20-22 per cent of cost of new plant or buildings are intended to encourage companies in areas of high unemployment to invest. But the Government's clamp-down on industry spending and long periods companies wait for money are deterring applications.

Grants are paid by the regional offices of the Department of Industry. Recently there was criticism of the offices in Glasgow, Cardiff, Billingham and Bootle for slow processing.

The CBI in Glasgow and Chambers of Commerce in Edinburgh and Glasgow are *among* bodies complaining about slow payment and they have collected evidence from companies suffering hardship because of delay.

Mr. Colin McNab, assistant director in the CBI's Cardiff office, said delays and high interest rates companies were paying on overdrafts were reducing the value of grants. "They are now more of a revenue subsidy than a grant on capital," he said.

Mr. James Cran, director of the CBI's Newcastle office, said: "Our experience is that delays are getting longer rather than shorter, but all we get from the Department of Industry is excuses. It is having a terrible effect on the cash-flow of small companies, who are having to borrow at very high interest rates."

One cause of delay is the large number of applications which flooded in from places which are about to lose Development Area status under the Government's regional policy review last year.

In Scotland, for example, applications up to the cut-off period in March this year increased by one-third on last year, in spite of deterioration in general business confidence.

But since then there has been a dramatic fall in the number of companies applying. The drop has so alarmed Scottish Economic Planning Department officials that they are visiting companies to press them to apply for grants. "We want to assure them the Government is still in the business of helping industry," one official said.

Scottish Ministers are concerned about the effect on jobs and investment. They have suggested informally to the Department of Industry that it might be time to review the four-month moratorium on payments.

The problem has been compounded by the freeze on Civil Service recruitment. Grant-paying departments in some regional industry offices have a high turnover of staff and have not been able to fill gaps.

One-third of UK's £63m Eurogrant goes to Ulster

BY OUR BELFAST CORRESPONDENT

NORTHERN IRELAND is to receive more than one-third of the £63.5m grant to the UK under the first allocation this year from the European Social Fund.

The province is one of five European regions given "absolute priority" by the EEC Commission. It receives more than £23m to help finance a variety of training schemes for the young, the unemployed and handicapped.

Sig. Antonio Giolitti, the European Commissioner for Regional Policy, announced the list of recipients during a week-end visit to Northern Ireland.

Although he hoped the aid would enhance job prospects, particularly for school leavers and the young unemployed, Sig. Giolitti said he shared the pessimistic view that the assistance, in reality, did not serve to increase Government expenditure.

"Experience shows that it is always very difficult to achieve additionality. Very often it happens, not only in the UK but in other member states, that the European contribution is merely a substitute for national financing," he said.

The Social Fund allocation to the UK will assist vocational training, retraining and resettlement schemes with special *emphasis on helping the unemployed* and young people entering the labour market.

200 more jobs lost after 11% pay rise

ANOTHER 200 employees at Chesterfield's Glass Bulbs company are to lose their jobs, in addition to the 100 made redundant in January. The new redundancies, to take effect in three months, follow the company's award of an 11 per cent pay rise to its 1,300 staff and its warning that they could be pricing themselves out of work. The company makes fluorescent light tubes, car light bulbs and lampshades.

At Chesterfield, too, unions say they have been *notified of* 100 redundancies by Sheepbridge Engineering, which has been hit by loss of orders for Middle East countries.

At Ilkestone, Derbyshire, 558 staff at Domestic Industrial Pressings will go on short time because of falling demand for domestic appliances. They will start working alternate three- and four-day weeks after the company's annual summer holidays.

In Newcastle, Staffs, about 500 hourly-paid workers at a GEC Machines plant will start a three-day week today. About 80 people have been made redundant from the end of the week.

The Gatwick-based Air Europe, on the other hand, says it is to increase its workforce by 100 to nearly 400 over the next six months as it expands its jet fleet.

Trading profitably

BL has not sold off the Goodwin Barsby construction equipment business, as was suggested in a report in Friday's Financial Times. The company has been separated from Aveling Barford and is now part of the SP Industries division of BL. In 1979 Goodwin Barsby made a loss of £1.5m but in the first half of 1980 was trading profitably.

Indexed savings up

SALES of index-linked National Savings Certificates Retirement Issue had another good month in June with net receipts of £33.5m. But repayments of all non-indexed issues exceeded 19th issue sales to produce a net outflow of £1.2m.

All National Savings totalled £284.9m, and repayments £180.9m, giving a net inflow of £104m. Total savings at the end of June were £13.73bn.

Garment bodies unite

BY RHYS DAVID

A NEW BODY to represent garment manufacturers—The British Clothing Industry Association—has been formed from six existing organisations.

The new group will be headed by Mr. Norman Sussman, joint managing director of L. S. and J. Sussman, and in one of its first actions will begin joint wage negotiations with clothing trade unions this week.

In recent years the various sectors have been finding it necessary to co-ordinate efforts. This was previously done through an umbrella body, the British Clothing Industry Joint Council, which has now been wound up.

The organisations now coming together are the Clothing and Shirt Manufacturers Federations, and the British Apparel, Corsetry, Overall and Tie Manufacturers Association.

Mr. Sussman said yesterday the industry was facing its greatest crisis and needed a powerful voice to lobby for it. "We have listened to the calls by Government Ministers that we should do more to help ourselves. However, our industry, in common with all others, has a right to certain minimum standards of economic stability in terms of both market and fiscal conditions. Where we see the Government failing to provide these we should be failing in our responsibility if we did not press them to change course."

UK and U.S. seek total ban on whaling

BY ALAN FRIEDMAN

THE UK and the U.S. will call for a worldwide ban on all commercial whaling today at the opening session of the 32nd annual meeting of the International Whaling Commission in Brighton.

Mr. Richard Frank, chief U.S. delegate to the five-day meeting, said yesterday that he would urge an indefinite moratorium on behalf of the Carter Administration, because of "our uncertainty about the scientific evidence on whale-hunting."

Though whaling had been greatly reduced in the past five years, he said, further conservation measures were needed. But "whaling nations" such as Japan and the Soviet Union could "only be pushed so far."

There have been hints from both that if the commission totally bans commercial whaling, they may leave it and form a rival group. Sir Peter Scott, conservation adviser to the British delegation, expressed these fears last week.

Political impact would be greatest on Japan, the second largest whaling country. The Japanese, with the Russians, protested vehemently last year when the commission approved a ban on all commercial whaling in the Indian Ocean until 1989, and a ban on whaling by factory ships on the high seas.

This vote was passed 18—2 with three abstentions. Resolutions must have a three-quarters majority to succeed. Since last year the number of members has grown from 21 to 25, including anti-whalers such as Switzerland.

Mr. Jerry Wiggin, Parliamentary Secretary to the Ministry of Agriculture, opens the Brighton meeting today. He is expected to repeat the UK policy of a ban on all commercial whaling.

CONSUMER CONFIDENCE SURVEY

Level of optimism increases slightly

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

A SLIGHT improvement in the level of consumer optimism is suggested by the latest Financial Times survey of consumer confidence, published today.

The index for July shows a 4 percentage point improvement over last month but still leaves the index of future confidence standing at minus 27 per cent.

In July, about 19 per cent of the 1,082 consumers surveyed felt that conditions would improve—the highest level of optimism recorded so far this year. But 46 per cent of the survey still felt that conditions would worsen, which left the overall index still reflecting a high level of pessimism.

But the Government can take comfort from the fact that the underlying trend of confidence appears to be improving. The six-monthly index for July—which gives a more accurate picture of the trend over the past half-year—has fallen two points to minus 33 per cent. This is at about the same level as the six-monthly index stood last November.

The slight increase in optimism in July may have been due to such seasonal factors as people anticipating their holidays, which tends to make people *more optimistic.*

But it is perhaps significant that among the optimistic consumers in the survey there was a sharp increase in the numbers citing Government policies as their reason for optimism. This was cited by some 36 per cent, compared with 26 per cent last month.

The main reason for optimism, however, still remains the rather nebulous reason, given by 49 per cent (down 7 per cent from last month) who simply believe that "things must improve."

Among the numerically larger group of pessimistic consumers, unemployment has replaced inflation as the main worry. Some 36 per cent cited unemployment as their reason for pessimism—a rise of 3 per cent—while 30 per cent (down from 38 per cent) were worried by inflation.

Industrial disputes were still only cited by 4 per cent as a reason for pessimism.

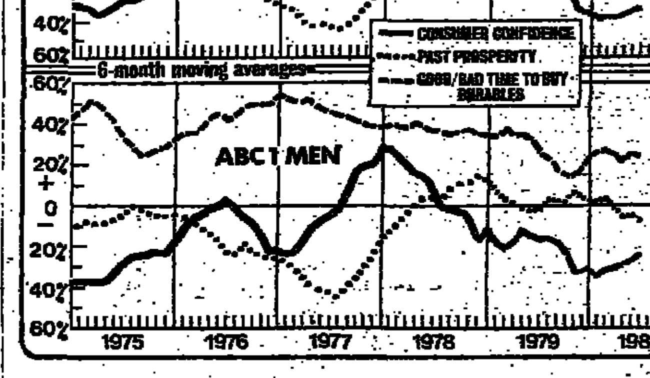
Analysis of the survey shows that the increase in future confidence was fairly evenly spread among all social sub-groups. The index for ABC1 women (professional and executive) has reflected the least pessimism over the past year.

This group's relative optimism has been *mainly* due to their greater support for Government policies; in July, for example, there were five times as many favourable mentions of the Government's policies as there were unfavourable.

In a separate question on unemployment, the survey showed that 65 per cent thought unemployment would increase, while 12 per cent expected it to fall. This gave an "unemployment index" of plus 53 per cent, the same as for last month.

The index of past prosperity, showing how families feel in relation to a year ago, was unchanged this month. Some 22 per cent thought they were better off than a year ago, while 43 per cent felt worse off. This gave an index figure of minus 21 per cent, the same as for last month.

The Financial Times survey of consumer confidence was carried out between July 3-9 by British Market Research Bureau. A sample of 1,082 adults was interviewed.



Harold Brockman, writer on architecture, dies at 77

HAROLD BROCKMAN, OBE, who died aged 77 on July 18, had been the architectural correspondent of the Financial Times since 1961.

He first trained as a lawyer but later decided to study architecture at the Northern and Regent Street Polytechnics.

After the Second World War he was a member of the London County Council historical buildings division, where he initiated the Preliminary listing of historic buildings in the London boroughs. In 1946 he moved to the Ministry of Housing and Local Government, and developed a link with the Royal Fine Art Commission for the visual assessment of local authority buildings.

Before joining the staff of the Financial Times he wrote for many professional journals, but felt it was the duty of an architectural writer to make buildings more easily understood by the layman. In this field he was an important pioneer and his detailed and meticulous reviews gave an unbiased view of new British architecture during the building boom of the 1960s. He defended established architects of the day, saying "architects are not to blame for the concrete jungle." He felt some local authorities and developers misused modern architecture, seeing it simply as a way to build cheaply.

He was the author of two books: The Caliph of Fonthill, a biography of William Beckford; and The Architect in Industry 1840-1940.

It was his role in organising the Financial Times Industrial Architecture Award from its inception 14 years ago that particularly earned him the respect of the architectural profession.

Harold Brockman will be much missed by his friends and the architectural profession. He was unfailingly courteous and kind and bore the death of his wife and his own long and painful illness with remarkable courage. After his retirement he remained a valued adviser to the Financial Times for its Industrial Architecture Award.

Colin Amery

How the Finance Bill has been changed

The Finance Bill, due to become law in the near future, has been considerably amended on its way through Parliament. Tim Dickson and Michael Lafferty explain the main changes to the original Bill.

THE RULES for profit-sharing schemes, originally conceived during the Lib-Lab pact in 1978, have been changed in two significant ways since the Finance Bill was first published. Companies operating such schemes can now give their employees shares in the business worth up to £1,000 a year.

These shares are subsequently held by trustees who are required to keep them for at least two years, after which the employee can if desired sell them. To discourage quick disposals, however, less income tax is paid on the proceeds of selling shares the longer they are held. In years three and four, income tax has to be paid on the full value of the shares sold: in year five it is paid on 75 per cent, in year six on 50 per cent, in year seven on 25 per cent and thereafter disposals are tax free.

These reliefs, an improvement on the original ones, were announced by the Chancellor in his March Budget statement to apply to share appropriations after April 6, 1980. At committee, however, the Government has decided to extend them to approved profit-sharing schemes begun on or after April 6, 1979. Individuals given shares on this date would therefore be able to cash them in after April 6 next year.

The other change was made at the report stage. This amendment extends profit-sharing arrangements to subsidiaries provided their parent company is quoted on a recognised Stock Exchange and is not a close company. The Inland Revenue acknowledges the difficulty of valuing the shares of subsidiaries and realises this concession is open to manipulation, which is why the schemes will be open only to subsidiaries of quoted businesses.

Savings related share option schemes, unveiled by the Chancellor in the Budget, have reappeared with more flesh on the bones. Share option schemes give employees the option to buy the shares of their company at a certain point in the future at a fixed price. The Government, meanwhile, plays its part by providing a special regular savings vehicle and exempting the employee from income tax if he opts to make the share purchase.

During the committee stage the outline of the new issue of SAYE contracts, which will be linked solely to share option schemes, was announced. The maximum monthly contract, for instance, will be £50, and contributions will be made through either *a building society* or the Department for National Savings.

The return will be geared to these monthly contributions, so that at the end of five years bonuses will be paid equivalent to 18 monthly contributions and, at the end of seven years, to 36 monthly contributions. An employee putting aside £20 a month would therefore have £1,560 after five years and £1,920 at the end of seven.

Contracts cashed in between years five and seven, meanwhile, will receive the five-year bonus plus interest on this bonus of 8 per cent, and contracts terminated before year five but after year one will attract interest on the contributions of 8 per cent. The new issue is expected to be launched by November.

As foreshadowed in the Budget statement, extensive new legislation was introduced at the committee stage to facilitate *splitting up independent* trades in the corporate sector. Ministers had in mind the sort of situation at GEC, where the management is said to have been considering splitting off part of the group by, for example, issuing shareholders with separate shares in two independent parts of the business.

The new legislation will allow such a split without any tax consequences. Relief extends from income and corporation tax to stamp duty, development land tax and capital gains tax.

The principle underlying the legislation is that relief only applies where no assets leave the corporate sector as a result of such schemes.

A number of groups, including the Laing group, have demerged under existing legislation. But the procedure was extremely complex.

Several amendments relating to leasing have been introduced. The basic principle is that assets which would not qualify for 100 per cent tax relief if brought by a company should not qualify for such allowances if leased. One of the main consequences is that 100 per cent capital allowances will no longer be available for *leasing* to local authorities. This means much of the leasing market, possibly up to £500m a year, is likely to disappear.

Expenditure on TV sets rented to customers is also affected by the new rules. However, the recent amendments provide for more transitional relief: 100 per cent capital allowances will continue for sets delivered in the period up to May 31, 1982, and allowances at 75 per cent and 50 per cent will be *given in the next* two years.

In addition, as a special measure, expenditure on View-data (Prestel) sets will continue to qualify for 100 per cent relief for sets delivered up to May 31, 1984, and for allowances at 75 and 50 per cent in the following two years.

The budget statement announced a special form of relief for businesses which may experience "temporary dips" in stock levels as a result of the recession or strikes, for example. Under existing legislation, such dips mean businesses affected become subject to a "stock relief recovery charge."

The Bill, as published, said the right to defer a recovery charge *would be restricted by* reference to the extent that a business was financing its stock through credit. Now, this restriction will apply only to the largest cases. The rule will be that the relief for "temporary dips" will be restricted on account of net indebtedness only where the net amount of the recovery charge (after deducting 5 per cent of the opening stock) is more than £100,000. Where the charge exceeds £100,000, the restriction will apply only to the excess.

UK NEWS – LABOUR

Callaghan hits at Tory job record at Tolpuddle rally

BY ELINOR GOODMAN, LOBBY STAFF

MR. JAMES CALLAGHAN, leader of the Labour Party Opposition, yesterday launched his most bitter attack yet on the Government's employment policies when he spoke at the Tolpuddle Martyrs' Memorial Rally.

At the rally, which is always an emotional occasion for the country's union movement, he accused Mrs. Thatcher's Government of "intolerable and inhuman complacency."

Mrs. Thatcher, he said, was dodging her responsibilities and was standing aside while whole industries collapsed. All Governments since 1945, he said, had until now accepted that it was their responsibility to seek to maintain a high and stable level of employment.

In contrast, the "Thatcher Government, under the personal direction of the Prime Minister herself, has, for the first time, foresworn any responsibility for maintaining a high level of employment." The country, he claimed, would accept nothing less than a complete change of policies.

Mr. Callaghan's attack is regarded as a foretaste of the protest which the Opposition is planning to unleash in the Commons tomorrow when the unemployment figures are announced.

Mr. Callaghan has asked all Labour MPs to be in the chamber for Prime Minister's Question Time in an attempt to orchestrate a sustained attack on the figures, which he predicted yesterday would be the worst since 1936.

His criticisms came as further indications emerged that both Ministers and some Tory MPs are becoming increasingly gloomy about the job outlook. Callaghan is hoping to build on agreed in principle to a new package of remedial measures to help cut particular kinds of unemployment. As yet no figures have been put on the value of these measures, but pressure for a generous package is almost certain to intensify as the unemployment figures get worse and Conservative backbenchers see the consequences of this in their constituencies.

The aim seems to be to announce the package in the autumn when some Ministers believe that the Opposition's message in Parliament about the effect of the Government's policies on jobs may be having an impact on the electorate.

Over the past few weeks, the Parliamentary Labour Party has begun to co-ordinate its opposition on the Government's employment record. Mr. Callaghan is hoping to build on this tomorrow.

Fresh moves over the Observer

BY PHILIP BASSETT, LABOUR STAFF

FRESH EFFORTS will be made tomorrow by the Advisory, Conciliation and Arbitration Service to resolve the pay dispute at the *Observer* which has caused the newspaper's management to issue a formal 90-day notice of the paper's closure.

The union at the centre of the dispute—the Nationa Graphical Association, representing print craftsmen—requested the meeting with Mr. Jim Mortimer, the ACAS chairman. Its purpose is to explain fully the progress on negotiations with the *Observer* on new rates for the 50 machine managers in the paper's machine room.

But the NGA seems set to do little more than place Mr. Mortimer in the picture. The union will then wait to see how far Mr. Mortimer can take the issue, though there were no plans at the weekend for the newspaper's management to be called in to ACAS even for separate talks.

Mr. Les Dixon, the NGA president, said yesterday he was hopeful that some way could be found to prevent the newspaper from closing.

Mr. Dixon was less optimistic about a possible intervention by the TUC, which has been asked as a matter of urgency to convene and chair a meeting of the unions involved. The request came from Mr. Bill Keys, the general secretary of the Society of Graphical and Allied Trades and chairman of the TUC's printing industries committee.

Mr. Len Murray, the TUC general secretary, who returned at the weekend from an official visit abroad, will study the position and Mr. Keys' request today and is likely to reply immediately to Mr. Keys' proposals.

The *Observer* yesterday confirmed its position, both by publishing in full its own board statement announcing the closure notices, and by declaring in its editorial column that the newspaper could only reach agreements "that allow it to be self-supporting."

● Both sides in the BBC dispute over cuts in the Corporation's orchestras, which has caused the first of this year's official Promenade concerts to be abandoned, are also due to see ACAS today, to discuss the idea of mediation.

● Further inter-union wrangling is expected today at a meeting of the TUC's finance and general purposes committee, which is faced with taking a decision on calling on the unions involved in the Isle of Grain power station dispute to follow the TUC's proposals for ending the dispute.

The issue, which will also come before the TUC general council this week, was further exacerbated at the weekend by strong criticism of the TUC's position from Mr. Frank Chapple, the general secretary of the Electrical and Plumbing Trades Union.

WEEK'S FINANCIAL DIARY

The following is a record of the principal business and financial engagements during the week. The Board meetings are mainly for the purpose of considering dividends and official indications are not always available whether dividends concerned are interims or finals. The sub-divisions shown below are based mainly on last year's timetable.

TODAY
COMPANY MEETINGS—
Amber Industrial, Cater House, 2-4, St. Mary Axe, EC, 2.30
Bridgend Processes, Winchester House, 77, London Wall, EC, 10.30
Norcros, Connaught Rooms, Great Queen Street, EC, 12.00
BOARD MEETINGS—
Finals:
Cawdaw Ind.
Child Health Research Inv. Tst.
Crown House
Initial Services
Siebe Gorman
Interims:
Alexanders Discount
Lambert Howarth
London and Lomond Inv. Tst.
Meggitt
DIVIDEND & INTEREST PAYMENTS—
Allied London Props. 0.45p
Dewhirst Dent Ln. 3½pc
Dubilier 0.6508p
Exchequer 10¼pc 1995 5⅛pc
First Castle Secs. 0.724p
Fledgeling Invs. Db. 3½pc
Hill Samuel Fltg. Rate Nts. 1991 US$ 72.36
Iris Hydraulic Tin 5p
Marshals Universal 3.04p
Morgan Crucible 3p
Offshore Mining US$ 72.04
Panama Serial Nts. 1991 US$ 742.53
Scotts Rest. 3.2p
Shires Inv. 7.95p
TOMORROW
COMPANY MEETINGS—
Allied Breweries, Chartered Insurance Institute, Aldermanbury, EC, 2.30
BET Omnibus Services, Stratton House, Piccadilly, W, 3.30
Eastern Produce, Winchester House, 100, Old Broad Street, EC, 12.00
Hambros, 44, Bishopsgate, EC, 12.00
New Throgmorton Tst., 25, Milk Street, EC, 12.30
Normand Elec., Kensington Palace Hotel, De Vere Gardens, 11.45
Pegler-Hattersley, Doncaster Racecourse, Doncaster, 12.00
Robertsons Foods, 50, Burnhill, Beckenham, Kent, 10.30
Sterling Inds., Cayzer House, 2-4, St. Mary Axe, EC, 12.30
Whitbread, The Brewery, Chiswell Street, EC, 12.30
BOARD MEETINGS—
Finals:
Amalgd. Distilled Prods.
Arlington Motor
Astra Ind.
Dowty
Hogg Robinson
MFI Furniture
Neepsend
Priest (Benjamin)
Wheeler's Restaurants
Wyndham Eng.
Interims:
Bootham Engineers
Eurotherm Intnl.
Gillett Bros. Discount
Vantage Secs.
DIVIDEND & INTEREST PAYMENTS—
Arrow Chems. 1p
Exchequer 13¼pc 1987 6⅝pc. Do. 12pc 1999-2002 6pc
Normand Elec. 1.90730p
Scottish Inv. Tst. 1.7p
Treasury 13¼pc 1997 6⅝pc. Do. 12¼pc 1992 6⅛pc
Treasury 14pc 1996 £4.5550. Do. 11¾pc 2003-07 5⅞pc
Wolverhampton Steam Laundry 0.35p
WEDNESDAY, JULY 23
COMPANY MEETINGS—
Airflow Streamlines, Saxon Inn, Motor Hill, Silver Street, Northampton, 12.00
Andersons Rubber, St. John Street, Bedminster, Bristol, 10.30
Austin (E.) (London), Winchester House, London Wall, EC, 12.00
Bisichi Tin, Clement House, 99, Aldwych, WC, 12.00
British and Commonwealth Shipping, Baltic Exchange Chambers, St. Mary Axe, EC, 12.00
Brown Shipley, Founders Court, 2, Moorgate, EC, 12.30
Caledonia Invs., Cayzer House, 2, St. Mary Axe, 3.00
De La Rue, Cafe Royal, Regent Street, W, 11.30
English and Intnl. Tst., 117, Old Broad Street, EC, 12.15
Ferranti, Millbank Tower, Millbank, 12.15
GEI, Savoy Hotel, Strand, WC, 12.00
Keyser Ullmann, 25, Milk Street, EC, 12.00
MK Electric, Chartered Accountants Hall, Moorgate Place, EC, 12.00
Monks Inv. Tst., Great Eastern Hotel, Liverpool Street, EC, 10.00
Plysu, Winchester House, 100, Old Broad Street, EC, 12.00
Scottish European Inv., 45, Charlotte Square, Edinburgh, 2.30
Staveley, Royal Institute of Chartered Surveyors, 12, Great George Street, Parliament Square, SW, 12.00
United Kingdom Property, 16, Hans Road, SW, 10.00
WGI, Lloyds House, Alderley Road, Wilmslow, Cheshire, 12.00
BOARD MEETINGS—
Finals:
Investment Co.
McLeod Russel
Steinberg
Wood (S. W.)
Interims:
Albion
Edinburgh American Assets Tst.
Moorside Tst.
DIVIDEND & INTEREST PAYMENTS—
Austin (E.) (London) 3.55p
BET Omnibus Services 10pcPf. 3.5pc
Banco de la Nacion Argentina Fltg. Rate Nts. 1983 US$ 78.94
Dixor and Robbins 1.98p
English China Clays 2.5p
Hanson Tst. 3.75p
Kansallis-Osake-Pankki Fltg. Rate Cap. Nts. 1988 US$ 73.9375
London Sumatra Plantations 6p
Midland Intnl. Financial Services BV Gtd. Fltg. Rate Nts. 1993 7⅛pc
New Throgmorton Tst. Income 0.9p
THURSDAY, JULY 24
COMPANY MEETINGS—
Anglo-Indonesian Cpn., 37, Queen Street, EC, 12.00
Attwood Garages, Clarendon Hotel, Chapel Ash, Wolverhampton, 12.00
Berdon Hill, The Holiday Inn, St. Nicholas Circle, Leicester, 11.30
Beechwood Construction, Dragon Hotel, Swansea, 12.00
Bell and Sime, Dundee Sawmills, Marine Parade, Dundee, 12.00
Braby Leslie, Abercorn Rooms, Bishopsgate, EC, 12.00
Brunning, Brunning House, 100, Whitechapel Road, E, 12.15
Burnett and Hallamshire, Cutler's Hall, Church Street, Sheffield, 12.00
Butterfield Harvey, Connaught Rooms, Great Queen Street, EC, 12.00
Century Oils, Grand Hotel, Trinity Street, Hanley, Stoke-on-Trent, 12.00
Chapman (Balham), Great Eastern Hotel, Liverpool Street, EC, 12.30
Dualvest, 117, Old Broad Street, EC, 12.15
Exchange Telegraph, Extel House, East Harding Street, EC, 12.00
Geevor Tin Mines, Pendeen, Penzance, Cornwall, 12.15
Hargreaves, Bowcliffe Hall, Bramham, Wetherby, West Yorkshire, 12.00
Humphries, Cafe Royal, Regent Street, W, 12.00
Metal Box, The Glaziers Hall, 9, Montague Close, London Bridge, SE, 12.00
Natl. Carbonising, Great Eastern Hotel, Liverpool Street, EC, 12.00
Pauls and Whites, Pauls and Whites Sports and Social Club, Stone Lodge Lane, Ipswich, 12.15
Premier Consolidated Oils, Winchester House, 100, Old Broad Street, EC, 12.00
Readicut Intnl., Abercorn Rooms, Great Eastern Hotel, Liverpool Street, EC, 12.30
Stonehill, Churchill Hotel, Portman Square, W, 11.30
Tanjong Tin Dredging, 65, London Wall, EC, 12.30
Tern Consulate, Lawrence Road, Tottenham, N, 12.00
Tunnel Hldgs., Caxton Hall, Caxton Street, SW, 12.30
Valor, Tallow Chandlers Hall, 4, Dowgate Hill, EC, 12.00
Witan Inv., 11, Austin Friars, EC, 11.30
BOARD MEETINGS—
Finals:
Cawoods
Common Market Tst.
Davy Cpn.
Laurence Scott
Mining Supplies
Monk (A.)
Negretti and Zambra
Preedy (Alfred)
Stroud Riley Drummond
Interims:
Automated Security
Bullough
Cardinal Inv. Tst.
Corn Exchange
Derby Tst.
Jacobs (John I.)
Jatel
Lovell (Y. J.)
Portsmouth and Sunderland Newspapers
St. Andrew Tst.
Tace
DIVIDEND & INTEREST PAYMENTS—
Bell and Sime 5p
Chapman (Balham) 3.8p
MEPC 1.75p
Plysu 1.2148p
FRIDAY, JULY 25
COMPANY MEETINGS—
Armitage Shanks, Chamber of Commerce House, 75, Harborne Road, Birmingham, 12.00
Billam (J.), Royal Victoria Hotel, Sheffield, 12.00
Capital and Counties Property, St. Andrews House, 40, Broadway, SW, 12.00
Chamberlain and Hill, Chuckery Foundry, Walsall, 12.00
Crosby Spring Interiors, Fleece Hotel, St. Helens, 11.00
Downs Surgical, Selfridge Hotel, Orchard Street, WC, 12.00
Glitspur, Mount Royal Hotel, Bryanston Street, WC, 12.00
Greenhaven Secs., St. Andrews House, 40, Broadway, SW, 10.10
Hawtin, Metropole Hotel, Blackpool, 1.30
Jones (Edward), Plascelyn, Bangor Road, Penmaenmawr, 10.30
Joseph (Leopold), Brewers Hall, Aldermanbury Square, EC, 12.00
Portsmouth and Sunderland Newspapers, The Echo, Pennywell Industrial Estate, Sunderland, 12.30
UKO, Winchester House, 100, Old Broad Street, EC, 12.00
West Bromwich Spring, Chamber of Commerce, 75, Harborne Road, Birmingham, 12.00
Westbrick Prods., Rougemont Hotel, Exeter, 12.00
BOARD MEETINGS—
Finals:
Brown (John)
Burt Boulton
Ingram (Harold)
RFD
Sommerville (William)
Tomkins (F. H.)
Interims:
Howard Machinery
Midland Bank
Plastic Constructions
DIVIDEND & INTEREST PAYMENTS—
Agrl. Mort. Cpn. 15½pcBds. (30/1/81) 7¾pc
Anglo-American Cpn. of South Africa 50cts.
Atkins Bros. (Hosiery) 2.9p
Bankers Tst. New York Cpn. 82.5cts.
Beechwood Construction 1.58p
Beralt Tin and Wolfram 5p
Billam (J.) 3.6p
Bifton (Percy) 4.4p. Do. Acum. 0.1p
CPC Intnl. 85cts.
Camford Eng. 1.63p
Cement Roadstone 7pcPf. 2.45pc
Chamberlain and Hill 1.5p
Clyde Blowers 0.82585p
Cowie (T.) 0.8p
Debenhams Lns. 3⅜pc 3⅞pc
Duple Intnl. 2.6p
Exchange Telegraph 4.75p
Geevor Tin Mines 5.6p
Gen. Electric 75cts.
Kayser Bondor Ord. Units 2.87p
Le Valloneet Inv. Tst. 1.5p
Lee (Arthur) 0.44p
London and Holyrood Tst. 3.5p
London and Prov. Tst. 3.2p
Manufacturers Hanover Cpn. 63cts.
Metal Box 11.83p
NCR Cpn. 50cts.
Ocean Wilsons 3.5p
Props. of Hay's Wharf 2.58p
Readicut Intnl. 0.7p
Sainsbury (J.) 7.25p
Scottish European Inv. 1.25p
Stonehill 4.5p
Tanjong Tin Dredging 1.25p
Treasury 13¼pc 2000-03 6⅝pc. Do. 10½pc 2000-03 A £8.9430. Do. 12pc 1995 6pc
Utico Pf. 4pc
Vina Del Mar (City) Chile 5pc (now 3pc) Stlg.Ln. (Asgd. 1948) 2⅝pc
Whitbread A and B Ord. 4.35p
Whitbread Inv. 3.52p
Witan Inv. 2p
SATURDAY, JULY 26
DIVIDEND & INTEREST PAYMENTS—
Crosby Spring Interiors 0.63p
Joseph (Leopold) 7.627p
Mid Southern Water 3.5pc (fmly. 5pc) Cons. Ord. 1.75pc
Portsmouth and Sunderland Newspapers Ord. Units 2.25p
Treasury 7¾pc 1985-88 3⅞pc. Do. 7¾pc 2012-15 3⅞pc
SUNDAY, JULY 27
DIVIDEND & INTEREST PAYMENT—
Camden Var. Rate Red. 1983 £8.6250

Labour and TUC plan to boost economy

By Our Lobby Staff

TRADE UNION and Labour Party leaders will today try to agree on a new joint economic strategy based on a major reflation of the economy. Fundamental to the strategy will be the imposition of selective import controls to ensure that the additional demand stimulated by it is not filled by imported goods but instead helps to boost sales of British goods.

Also suggested is the creation of a new State-owned investment bank and the introduction of planning agreement—both of which have long been discussed by the Labour Party.

A draft statement of the strategy is believed to avoid the sensitive issues of incomes policy. This is despite the fact that both Mr. James Callaghan, the Labour leader, and Mr. Denis Healey, the shadow Chancellor, still believe that some kind of agreement with the unions over wages should be an essential part of a future Labour Government's economic strategy.

The document has been substantially revised since it was last discussed by the TUC liaison committee. At that time Mr. Callaghan argued that it should concentrate more on attacking the present Government's policies and less on trying to create new policies for a Labour Government.

Others complained that it did not sufficiently analyse the reasons behind Britain's decline. But the remedies proposed seemed to have stayed broadly the same despite the revision.

As far as import controls are concerned, the document makes it clear that they should be aimed at reducing imports from other industrialised countries rather than from the developing world.

No sectors are named as specifically needing such protection, but the idea seems to be that import penetration ceilings would be introduced across a wide range of industries to ensure that imports did not increase their share of the British market.

If approved at today's meting of the TUC liaison committee, the document will have to be formally agreed by the executives of both the Labour Party and the TUC.

APPOINTMENTS

Anchor Chemical chairman change

Mr. Bryan B. Pugh has become chairman of ANCHOR CHEMICAL in place of Mr. H. K. Justi, who has resigned from that position but continues as a non-executive director.

Mr. Justi, who was appointed chairman last year following the sudden death of Lord Hewlett, offered his resignation as chairman because of demands made upon him as chief executive of Sartomer Industries Inc., of the U.S.

*

Mr. Michael Towns is leaving UNITED RUM MERCHANTS to take up an appointment in Nigeria. Mr. Mike Hearder, chairman of URM, will become chief executive of that company. He is a director of Booker McConnell and chairman of the group's spirits, liqueurs and international trading division. Mr. Stanley Thompson, at present deputy managing director of URM, will become vice-chairman.

*

Sir Willie Morris has been appointed to the Board of LLOYDS BANK INTERNATIONAL from September 1. He will succeed Mr. Henry Hankey, who will retire at the end of that month. Sir Willie retired from the Foreign and Commonwealth Office in 1979. His last post was UK Ambassador to Cairo.

*

Mr. M. R. Luthert, executive director of Lloyds Bank International, has been appointed deputy chairman of the BRITISH OVERSEAS AND COMMONWEALTH BANKS' ASSOCIATION for 1980-81. The chairman is Mr. Ronald S. T. Robbins, manager of the chief London branch of Canadian Imperial Bank of Commerce.

Parliamentary business

TODAY

COMMONS—Debate on Opposition motion on the Government's damaging policies towards publicly owned and supported industries. Motions on MPs' salaries, pensions and allowances.

LORDS—Housing Bill, report. Motion on EEC supplementary revenue order.

SELECT COMMITTEES — Energy on Government's nuclear power programme. Witnesses: Friends of the Earth; 4.15 pm; Room 8. Treasury and Civil Service on monetary policy. Witnesses: Mr. Gordon Richardson, Governor of Bank of England. 4.30 pm; Room 15. Public Accounts on role of Comptroller and Auditor General. Witnesses: Mr. John Garrett, MP, Sir Douglas Henley, Comptroller and Auditor General, 4.45 pm; Room 16.

TOMORROW

COMMONS—Criminal Justice (Scotland) Bill, remaining stages. Northern Ireland Orders.

LORDS — Motion on Lords expenses and ministerial and other salaries and pensions order. Housing Bill, report.

SELECT COMMITTEES—Defence on D Notice system. Witnesses: New Statesman, Sunday Times, Mr. Leonard Dourie. 10.30 am: Room 8 Treasury and Civil Service on monetary policy. Witness: Prof. D. Laidler. 10.45 am: Room 15.

WEDNESDAY

COMMONS—Civil Aviation Bill, third reading. Criminal Justice (Scotland) Bill, remaining stages. Northern Ireland Orders.

LORDS—Debate on European Air Fares Ground Game Bill, second reading.

SELECT COMMITTEES—Defence on strategic nuclear weapons policy. Witness: Mr. David Greenwood. 10.30 am; Room 8. Education, Science and Arts on the first scrutiny session 1980. Witness: Mr. Mark Carlisle, Education Secretary. 10.30 am; Room 6. Energy on nuclear power programme. Witnesses: Central Electricity Generating Board. 11 am; Room 16. Public Accounts on role of Comptroller and Auditor General. Witnesses: Sir Douglas Henly, Comptroller and Auditor General. 4 pm; Room 16.

THURSDAY

COMMONS—Coal Industry Bill, remaining stages. Coal Industry (Borrowing Powers) Order. Magistrates Courts Bill (Lords).

LORDS — Broadcasting Bill, second reading. Short debate on parole system.

SELECT COMMITTEES—Home Affairs, sub-committee on race relations and immigration on racial disadvantage. Witnesses: Civil Service Department, Civil Service Unions. 4.30 pm; Room 15.

FRIDAY

COMMONS—Motions on EEC documents on New Zealand butter and protection of workers from exposure to metallic lead compounds.

INSURANCE

Judging burglar alarm clauses

BY OUR INSURANCE CORRESPONDENT

IT HAS long been insurers' normal practice, when providing crime-loss cover on goods attractive to thieves, to require the installation and maintenance of anti-theft devices. Where, for example, insurers stipulate burglar-alarm, they put into the policy they issue a particular clause.

This requires the policy-holder to keep the alarm in efficient working order, to keep it under a proper maintenance contract with the burglar-alarm company fitting it, to summon that company immediately there is any defect, and to have the alarm set and operational when premises are closed for business.

Though the purpose of all these clauses is the same, their precise wording varies from insurer to insurer, as does their legal nature. Sometimes the clauses are written as warranties, so that breach goes to the root of the contract.

But more often they are written as conditions precedent to liability, or simply as exclusions. Wherever possible, the practice of the courts now seems to be to construe such clauses as exclusions, applicable, if at all, to the particular claim when it occurs.

Of interest to policy-holders with burglar alarm installations, to insurance brokers, and to insurers themselves, is the report of the dispute in *Melik and Co. v. Norwich Union*, on which Mr. Justice Woolf recently gave judgment. The case is reported in [1980] 1 Lloyd's Rep 523 and noted at para. 127 of the June issue of Current Law.

Melik and Co, through brokers, had burglary cover with Norwich Union. A clause in the policy required the burglar alarm to be kept in efficient working order and in full operation at all times when the premises were closed. The alarm was of the silent kind that sends a warning to the alarm company's control centre.

On December 20, 1977, a line fault was detected — the telephone cable had been cut in a manhole outside the premises. The alarm was switched, to give an immediate audible warning, the police were asked to make extra patrols, the Post Office and the alarm company were advised. The brokers twice confirmed to Melik and Co. that they were still covered but did not refer back to insurers.

On December 22 there was a burglary. Insurers refused the claim, saying that the alarm clause had been breached, that the alarm had not been kept in efficient working order, nor kept in full operation at the crucial time.

The dispute was complicated by the broker's assertion that there was cover. But leaving this aspect aside and concentrating on the straight argument between policy-holder and insurers, the judge had much of interest to say on the meaning of the alarm clause.

In his view "keeping in an efficient working order" is not an absolute obligation. The policy-holder only fails to keep if he knows of the facts giving rise to inefficiency, or ought to to know by exercise of common care. And, once he knows, he must be given sufficient opportunity to get the alarm in an efficient state again.

Because he must be given time, it cannot be said that the policy-holder, taking immediate action, doing all he reasonably can, is in the short term failing to keep the alarm in full operation.

The judge also held that on the facts, the alarm was operating efficiently. It was the external cut cable that prevented it doing its job of communicating the fact of the burglary through the telephone system.

A nice point, but it is always necessary to construe conditions precedent and exclusions, restrictively. The Norwich-Union clause spoke of the "burglar-alarm installed at the premises." and, clearly, these words were not apt to cover the cables outside, however essential they were to the alarm's operation.

Undoubtedly it is possible for insurers to devise words apt to deal with both installation and communication and to eliminate the interpretation of the word "kept" adopted by the judge.

But is this reasonable? In the case of most hazardous goods, insurers would doubtless say "Yes." But as ever, policy-holders and their brokers may disagree with them.

Technical News

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

● COMMUNICATIONS

Will transmit data around the plant

SINCE INTERSIL, the U.S. semiconductor company took over Datel for $16m cash last year the two companies have been working towards a con concerted approach to digital industrial communications systems with the emphasis on data acquisition.

The company, which had revenues of $140m in 1979, has been growing at 20 per cent per annum and has now announced *a number of new products in* both device and system areas.

One of the most interesting has been named Remdacs and it allows automatic polling and digital data transmission from up to 256 remote stations with 12 bit accuracy over a single pair line. The cost per channel *can be as low as £20.* Remote station cards digitise analogue data, supply control output, perform multiplexing and analogue to digital conversion and communicate in serial mode with a receiver/transmitter card at the host computer location. The remote units can be up to a mile away.

Thus, in complex control system environments, the substantial quantities of cabling normally encountered are done away with.

The company sees a large future market for this kind of equipment, perceiving the trends in control technique in terms of more and more distributed intelligence, the use of digital transducers, solid state motor control and in general the reduction of the number of people interposed in the control loop.

To help potential users in assessing the product, the company is offering evaluation kits costing £680 in three configurations.

In the device area the company has announced the ADC817, a compact hybrid device for analogue to digital conversion with a conversion time of only two microseconds. The circuit has five pin-programmable input voltage ranges and serial or parallel data output.

Other devices include a new liquid crystal display driver and a low noise chopper stabilised operational amplifier.

More from Intersildatel (UK), Snamprogretti House, Basing View, Basingstoke, Hants RG21 2YS (0256 57361).

Terminal equipment

A FURTHER generation of communications terminal equipment has been announced by Sperry Univac, designated UTS 4000.

It consists of a range of Teletype compatible equipment including the UTS 4020 cluster controller, two displays UTS 10 and 20, the latter for editing, and the UTS 40 user programable VDU.

The cluster controller can support up to 12 of the UTS 20 workstations and is designed for on-line and interactive processing. Some 16 peripheral devices can be accommodated.

Both the 10 and 20 workstations have 12 inch CRT and detached keyboard; UTS 40 has the same size screen but a selection of four pluggable keyboards is available, and it can be programmed using UTS Cobol which is offered on the company's 90, 80 and 1100 host systems. The terminal can have up to 64k bytes of user memory.

Program cartridges plug into the back of the devices to provide different functions and these also make it possible to update the system with new enhancements.

The system and application development software offered includes control program, UTS Cobol, interactive program generator and edit processor.

More from 65 Holborn Viaduct, London EC1P 1AB (01-236 1010).

● TRANSLATION

Electronic phrase book

ALTHOUGH THE device that will translate what is fed into it into another language is still a long way off, a useful half-way house has emerged from Sharp Corporation in Japan.

It is a pocket calculator-sized keyboard and liquid crystal display unit into which modules can be plugged to allow translation of 152 selected, frequently used sentences into another tongue.

There are 14 categories of businessman's/tourists' activities ranging from things that might have to be asked at airport and customs to sightseeing.

A search function using the keyboard and display finds the appropriate sentences from the 14 categories and it is also possible to translate up to 2,000 specific words. It is even possible to alter key words or numbers in the standard sentences to suit the requirement.

The unit has a dot liquid crystal display of 23 characters which will roll from left to right if more than 23 characters are involved. Modules are available for English, German, Spanish, French and Japanese; *Italian and Portuguese* will be available later.

More from Sharp House, Thorp Road, Manchester (061 205 2333).

● PUBLICATIONS

Maintaining sewers

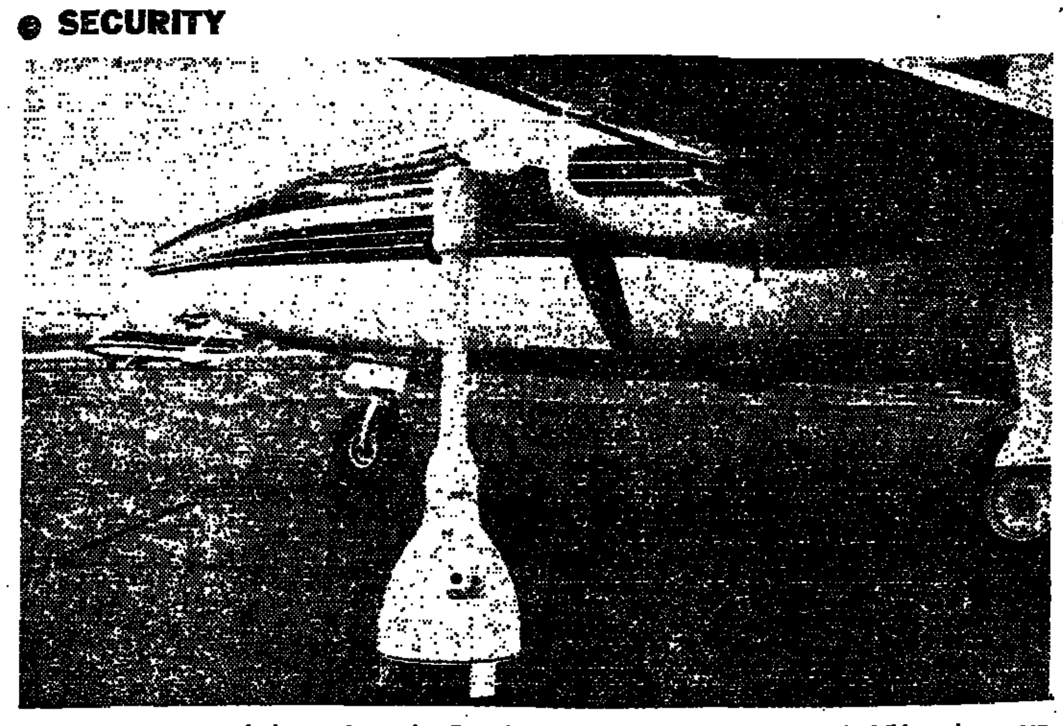
LESS THAN 5 per cent of England's 124,000 miles of public sewers are large enough for a man to *enter—the rest can* only be inspected by closed circuit television.

Internal sewer surveillance is expensive, and a programme to inspect every UK public sewer once every 20 years would cost about £6m a year in contract payments (excluding pre-cleaning and additional labour) and, putting the matter into perspective, a 1 per cent renewal programme would cost roughly £200m a year.

Obtaining the best value for *money from surveys, improving* understanding of sewer damage and deterioration in order to limit the proportion of sewers requiring examination, and learning which defects are serious enough to justify attention, are problems facing the National Water Council's standing technical committee on sewers and water mains.

It has produced a report which sets out standard terminology and methods of recording the internal condition of both brick and pipe sewers—"Manual of sewer condition *classification*"—now available at £6 (plus 40p p & p) from NWC Publications, 1 Queen Anne's Gate, London SW1 (01-222 8111).

● SECURITY



Placed close to a parked areoplane, the Racal-MESL portable sensor provides an invisible radar screen which will detect anyone trying to gain access to it

Signals approach of intruders

ATTEMPTS TO tamper with aircraft while they are unattended on the ground will be foiled by a new transportable radar alarm developed by Racal-MESL in Scotland.

The device was originally designed following a specific request from a major European airline. It weighs 12 kg and is of a vertical format that allows it to be concealed, for example, under a conventional marker cone of the type often used at airports.

The area covered by the *emitter at the top of the device* can be accurately adjusted to suit the user's needs so that any intruder moving into the protected area (walking or crawling) will activate the alarm. This can be a siren, flashing light or a radio link to some other warning system.

Racal states that traffic passing close to the protected zone or small animals or birds straying into the area will not trigger *the system.*

The company foresees many other uses for the device such as protection of high value lorry loads, and in storage areas.

More from the company at Preston Road, Linlithgow, West Lothian.

● DATA PROCESSING

ICL mini-computer prices cut

SOME 17,000 of ICL's 1500 Series minicomputers have now been sold throughout the world and as a result of the economies of scale and also some rationalisation of the range, price cuts averaging 25 per cent have become possible.

Thus, a basic 1501 machine with 8 kilobytes of storage costs just over £2,500 while the larger 10 megabyte disc system, suitable for use as a stand-alone or distributed processsor can be obtained for under £9,000. The previous 33 variants of this series have now been reduced to five, based on the 1501 and the larger screen 1505, both of which can be used independently or with a common disc system.

Maximum main storage on both models has been increased to 32 kB and a new 5+5 megabyte fixed and exchangeable extension disc drive has been additionally made available.

There are also additions to the software including a new issue of the disc-based compiler and an improved business transaction language. Both disc and communications software have also been enhanced.

ICL is at Putney, London SW15 1SW (01-788 7272).

Scope of machines widened

EFFICIENCY AND scope of the work that can be carried out on the AM Varityper Comp/Set phototypesetters has been extended by the release of two new software packages.

One of these allows the machines to be used in the so-called "foreground-background" made in which two operations are able to progress at the same time. One of the pairs of tasks available is edit/count in which the operator can be scrolling and editing text on the screen in "the foreground" while typesetting previously edited and counted txet in 'the background." Alternatively, the operator can key, count and record on to a floppy disc in the foreground while typesetting previously recorded text in the background.

A sort/merge routine has also become available; this allows alphabetical or numerical sorting to be carried out in the production of items such as classified advertisements, small directories and parts lists.

The new routines require additional floppy disc capacity and random access memory.

More from the company at 44 Church Street, Luton, Beds. (0582 421711).

● MATERIALS

Keeps the water at bay

A WATERPROOFING membrane to prevent the migration of water through concrete and masonry has been introduced by Fosroc Construction Chemicals, Vimy Road, off Leighton Road, Leighton Buzzard, Beds LU7 7LF (0525 373773).

Among the claimed advantages of Jiffy Seal are flexibility, resistance to puncture and abrasion, and easy installation. Neither heat nor special tools are needed.

Two grades are available. The 140 Grade (1.4mm thick) is suitable for floor slabs, tunnels, roofs, car parks, basements, subways, reservoirs and sewage plants, and the extra heavy duty 400 Grade (2.7mm thick) is intended for bridge deck waterproofing. It can be applied to most surfaces provided Jiffy Seal primer is first applied.

The company says the material is constructed from a formulation of premium grade bituminous resins modified with synthetic resins, with an exceptionally strong reinforcement layer to withstand puncture and severe stress.

● INSTRUMENTS

Testing of optical fibres

A DEVICE that can be used with great ease to measure the attenuation in lengths of optical fibre has been introduced by Biccotest, Delamare Road, Cheshunt, Hertfordshire EN9 9TG (Waltham Cross 29011).

Fibre diameters up to 125 microns can be accommodated and bare terminations are employed prepared, perhaps, with the BICC optical fibre cutting *tool. They are simply inserted* into detector and source sockets on the front panel.

Then, attenuation is shown on a three digit liquid crystal display up to 60dB with a resolution of 0.1 dB.

To eliminate end effects, after the unknown length has been measured a very short length is connected between the sockets and this reading subtracted from the original one. The nett value is the true attenuation of long length.

The instrument is provided with a horizonetal platform which allows the parallel fibres to be turned through 90 degrees, giving easy exit from a drum while the panel remains unobscured.

● PUMPS

Submersible hydraulic pump

WHEN water has to be pumped from depths of 30 feet or more there is always the problem of where to position the power unit be it a diesel engine or an electrically powered unit. It almost certainly has to be located some way down the shaft.

This problem, it is claimed, can be overcome by using the Hydrainer hydraulic submersible pump manufactured by Ponwood Engineers and distributed by SLD Pumps.

Main roles for the Hydrainer are said to lie between conventional diesel non-submersible pumps and the submersible electric pump. It is supplied with a diesel-hydraulic power pack and can be mounted on a road trailer. One of the two models available will handle slurry and sludge.

The 4-inch Hydrainer is stated to give a maximum lift of 70 feet and can be run continuously. Full details can be obtained from SLD, Portobello Industrial Estate, Chester-le-Street, Co. Durham. (0632 404611.)

● COMPONENTS

Keyboards from Sweden

A VARIETY of keyswitches, keyboards and related accessories made by *Witsbo Elektronik AB* of Stockholm are to become available in the UK through Cosmocord, Eleanor Cross Road, Waltham Cross, Herts (0992 716666).

Included are high performance reed switches and long life low-bounce mechanical types. Options include low profile, angled top and illuminated styles with a choice of colours and legends.

Building and Civil Engineering

£17m printing works award to Wimpey

FIRST PHASE of News International new printing works in London E1 has been awarded to Wimpey Construction UK under a design and construct £17m contract.

Additional printing facilities will be provided at the building *on a 13-acre site in Pennington* Street. The 466,000 square feet steel framed main building will consist of both new and refurbished premises which promise ultimately to be one of the largest new industrial sites in London.

Project also includes site clearance which involves the breaking out of extensive foundations of dock warehouses previously on the site. Some of the existing warehouses are to be refurbished to form plant rooms and storage areas.

Piling work on site is now *substantially complete and the* first phase project is due for completion in November 1982.

Bristol region of the company is building a single storey warehouse at Cocklebury, Chippenham, Wilts., under a £659,000 contract from Wavin Plastics.

Factory in Cornwall

CONTRACT WORTH about £4m to build a factory for J. I. Case and Co., at Redruth, Cornwall, has been awarded to E. Thomas of Ponsanooth, member of Mowlem Group.

This is being built to meet the the increasing demand for Case's range of construction equipment including crawler loaders and dozers and will employ about 200 people on the Cardrew Industrial Estate.

Project involves building a 9,755 sq metre factory, annexe and paint store of 596 sq metres, *two storey offices, factory* link, attached canteen, and ancillary buildings.

Factory will be single storey and have a structural steel frame, rendered Dado walls, with insulated metal cladding and a metal deck roof.

£10.6m Laing contract

TRENT REGIONAL Health Authority has given the first phase for its third District General Hospital for Leicestershire to John Laing Construction under a *contract worth* £10.6m.

It will be known as Glenfield District General Hospital and construction starts this summer. It should be completed in three years time. Buildings will then be commissioned and the first patients could be admitted in the spring of 1984.

New hospital will be built in the grounds of the Leicester Frith Hospital on Groby Road, Leicester, *and the two storey* building will be finished in brick to blend in with the new Community Hospital alongside.

Preliminary site works, including roads, have already been completed at a cost of £265,000.

£9m awards to Crouch

CONTRACTS worth well over £9m have been won by Crouch Development.

Among the awards is a £1¼m *warehousing scheme at Bristol* for which Angus McDonald is the architect, while more warehouses are to be built at Leatherhead, Surrey, at a cost of £¾m.

It is understood that a major project for the company next year will be a £6m industrial *development at Tonbridge,* Kent. It is due to start soon after Christmas.

In the meantime, Crouch Construction is carrying out a £¾m office refurbishment project in South Audley Street, London W1. The company says it proposes to retain the refurbished offices as an investment.

At Crawley, Sussex, Crouch Construction is undertaking two *schemes for the Borough* Council. Total value of the contracts, for community centres, is about £1m.

Restaurant at Gatwick

WORK HAS started on a new £4.7m staff restaurant to replace a 16-year old building found to be inadequate for present demand at Gatwick Airport.

Three-storey building will have staff restaurant facilities on the ground floor with plant rooms and two floors of lettable office space above and will be of reinforced concrete with aluminium-framed bronze-tinted glazing.

Work will be carried out by local company James Longley and Co., and is scheduled for completion towards the end of 1981.

They will sit more comfortably

FURTHER development at the All England Lawn Tennis Club at Wimbledon is to be undertaken by W. S. Try. One of the main aims is to provide better seating on both North and South stands of No. 1 Court as well as provision of other improved facilities for spectators and players.

The contract is worth nearly *£3m and it is planned to complete* the project in time for next year's Championship.

Chivers secures £10m worth

AWARDS TO W. E. Chivers and Sons are worth over £10m, and include headquarters for Intel Corporation (UK) at Swindon, valued at £3.1m.

A net teaching block at Chiswick School for the London Borough of Hounslow is worth a further £939,000, while a new workshop at Gosport for the PSA on behalf of the Ministry of Defence will cost £1.4m.

Other work concerns major conversion at Rutherford Laboratory, Chilton (for the Science Research Council) and St. Martins Hospital, Bath, together worth over £1.1m.

Subsidiary company, R. J. Leighfield and Sons, has won contracts worth over £¾m for Thamesdown Borough Council (elderly persons housing) and a building and civil engineering maintenance contract at Kemble for the PSA.

Heating and plumbing section, Swindon Heating Installations, has started work on a factory heating installation in Swindon, valued at about £¼m; Read and Partners has a £108,000 electrical installation job at a Swindon *factory* plus a £79,000 West London office development; and, finally, the company is to carry out factory and warehouse projects on its own site in Devizes and undertake a commercial development at Bournemouth.

Busy in London and south-west

WORK IN central London and the south west of England covers six contracts, together *worth more than £3m, awarded* to Rush and Tompkins.

Largest project is an £889,000 design and build contract for Wessex Regional Health Authority for which the company will build three three-storey blocks of flatlets to provide staff accommodation at the regional *spinal* injuries unit, Odstock Hospital, Salisbury.

Work is starting on a £761,000 supermarket shell and car park project in Weymouth, Dorset, *for Durward Kingsley Estates* which is to be occupied by Keymarkets.

In London, the company has started on a £632,000 seven-storey office block in Berners Street, W1, for the Berners (St. Marylebone) Property Trust.

Work has also started on a £560,000 refurbishment at the British Transport police headquarters in Tavistock Place where the basement and ground floor will be fitted out to form *new staff facilities,* including a restaurant.

Further work in London includes a negotiated contract for office refurbishment at the British School of Osteopathy (worth several thousands of pounds), and a £100,000 contract for alterations to the preparation areas within the food halls at Debenhams store at Welbeck Street, W1.

Mine-shaft equipment

A SECOND order for mine shaft mechanical handling equipment in the Selby Coalfield has gone to Matthew Hall subsidiary, Qualter Hall.

This is for Wistow site, downcast shaft. This together with work already secured for the upcast shaft, brings the value of shaft works awarded to the company to £2.5m.

Lovell builds warehouses

THREE CONTRACTS, together worth £1.3m for the construction of 15 warehousing units in Sussex, Middlesex and Northamptonshire have been awarded to Lovell companies.

At Hanworth trading estate, Feltham, Middlesex, Y. J. Lovell (Southern) has started work for Standard Life Pension *Funds on the construction of* three single-storey warehousing units with integral double-storey office accommodation. The estate is close to Heathrow airport and the M3 motorway.

The units will have structural steel frames on piled foundations, power-float-finish floors, brickwork and metal sheet cladding and asbestos roofing.

At Shoreham-by-Sea, Sussex, Y. J. Lovell (Building) has begun erection of three warehousing sections constructed in part over existing storage buildings, which will subsequently be demolished.

The new building, which forms part of a phased redevelopment programme, will have a steel frame with concrete slab and column bases, blockwork and asbestos sheet cladding to the upper walls and roof.

Y. J. Lovell (Midland) is undertaking the third contract which involves building nine warehousing units in three blocks at Bunting Road, Northampton, for Lawson Hunt Industrial Developments.

The buildings — on a green *field site*—will have a concrete base and strip footing foundations formed on fibro-consolidated ground, with power-float-finish floors. An Atcost concrete column and steel roof frame structure is being used with plastic faced metal panel and brickwork cladding and with deep profile asbestos sheet roofing.

Housing and pipelines for Monk

WORK AT Milton Keynes, Bucks and in Yorkshire and Wales, is worth more than £1.2m to A. Monk and Co.

Company is to build 36 two-storey dwellings for private sale under a £596,000 contract from Milton Keynes New Town. Site is at Down Barn, and the basic timber construction with brick cladding wil consist of 24 houses of three bedrooms and garage, and 12 flats of two and one bedroom with garage facilities.

Monk pipeline division is undertaking work for British Gas and Wales Gas in a £702,469 group of contracts: at Easington, Co. Durham, there is a rerouting of a pipeline; in the mountainous area of Wattston, near Pontypridd, some 2,400 metres of 12 inch welded steel pipeline; and at Maesteg, 7.2 km of 200 mm welded steel pipeline is to be laid.

Refurbishing work in London

THREE LONDON refurbishment contracts are worth about £2.3m to John Lelliott, and include a *£1.6m project* to refurbish East India House, Regent Street, London, W.1, for Liberty and Co.

Work here includes stripping out the second to sixth floors, fitting false ceilings, installing air conditioning etc., and building a plant room and boiler house.

At Rye Lane, London S.E.15, the company has a £¼m contract for gutting a four storey building, strengthening the structure and introducing new floors and walls to form a new restaurant *for* McDonald Golden Arches Restaurants.

Internal construction of the Zetland Arms public house at Bute Street, South Kensington, is to be completed within six months under a contract worth around £260,000.

A £2m job for Sleeman

AWARDED TO the principal contracting company for Exeter Building and Construction Group, Sleeman Construction, is a £2m contract for the refurbishment of the existing building, and erection of new accommodation, to provide a further home for the Royal Masonic Benevolent Institution at Bournemouth, Hampshire.

The home will include medical treatment facilities, and lies in its own landscaped grounds which extend down to the sea. In all, the site covers about five acres.

Contract is due to start within the next few days and should be completed within 18 months.

IN BRIEF

● Chartered quantity surveyor E. C. Harris and Partners has been appointed by Taff Ely Borough Council to provide full cost control service for two major council house refurbishment projects in Rhydyfelin, near Pontypridd where £400,000 will be spent on improving 61 houses.

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THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ

How Reed is shifting its strategy from recovery to expansion

BY CHRISTOPHER LORENZ

MALCOLM GLENN has plenty of experience of ailing companies. A Briton with a top-notch pedigree as a North American turnaround specialist, he has just returned to Britain to sort out one of the country's best-known problem businesses. Not only have its profits slumped to perilously close on zero over the last three years, but it *is* now particularly exposed to the deepening economic recession.

Faced with a similar wave of pressures, many managers in other companies are simply going under—or at best floundering, content to muddle through from day-to-day and week-to-week, leaving tomorrow to look after itself. Yet Glenn not only still devotes precious time to planning for the development of his various products and markets into the late 1980s, but takes most day-to-day decisions in the light of that plan.

"When a business starts to suffer, a poor management will take short-term decisions," he says. "A good one will get its longer-term priorities sorted out, and stick to them—even if it means a painful couple of years in between."

This does not mean that Glenn is a slave to his plans; indeed, he and his parent company are currently discussing ways of making them more flexible. What it does imply is that a carefully planned short- and long-term strategy underlies almost everything he does. Provided he can show his managers that while effective planning may increase central control and impinge upon their independence, it also helps them *do* their job, his approach will gradually percolate down his 12,000-man company.

Glenn is the new chief executive of Reed Decorative Products, the paint, wall-coverings and do-it-yourself division of

Reed International, one of the largest British-based multinationals. To the public, the division is best known for its wide range of "Crown" paints, its "Polycell" pastes and fillers, and its stylish "Sanderson" wallpapers and fabrics.

To the business community, on the *other hand*, its image is largely negative. Under its traditional name of Wall Paper Manufacturers (WPM), it has had a troubled performance record for well over the 15 years that it has been part of Reed: it was taken over in 1965 by Reed's then chief, Don (now Lord) Ryder, as part of an ambitious expansion programme which ended in the mid-1970s with Reed facing a debt crisis.

Over the past three years, under Lord Ryder's successor, Sir Alex Jarratt, the Reed empire has been transformed from a debt-ridden, motley collection of businesses into a financially sound enterprise; its debt-equity ratio has been cut from almost 200 per cent to just 34 per cent, for example. Though still a conglomerate, it has been made more manageable, and is now—in general—very tightly run. Of the few remaining trouble spots, it is the sizeable wallcoverings side of Decorative Products which is in the most urgent need of restoration and repair.

The rapidity of Reed's recovery has surprised even Sir Alex's most ardent admirers—and there were many even before this crowning success. The turnaround is the result of both the massive divestment programme undertaken since 1977—Reed has shed a third of its assets—and of an all-round tightening of the group's coordination and control.

Behind both lay not only the mind-concentrating clarity of a crisis, but a new and highly systematic planning-and-control system which has helped top management in three key ways: to clarify the group's overall direction, and then to steer along it; to reconcile the constituent businesses' competing claims for resources; and to strengthen the centre's operational control. As Malcolm Glenn has found, in troublesome subsidiaries in Canada and at home, the system is also proving increasingly helpful at divisional level and below.

Of these benefits, the most prized is perhaps the ability to judge between the relative value and potential of disparate businesses—"our apples and pears," as Sir Alex calls them.

An "interactive" planning system of this sort is relatively rare, even in those multi-product companies which can match the agglomeration of businesses with which Jarratt initially had to deal: it was only *three years ago* that top management was forced to face the reality that Reed had as many as 60 different businesses, with *precious little* connection between them.

The influence of the new planning system on Reed's divestment programme should not be exaggerated: many of the disposals would have occurred anyway. But Jarratt is adamant that it played a significant role in several ways, including the choice of timing and acceptance or rejection of proffered prices.

Close observers of the programme will have noticed that Reed has *frequently* pulled back from selling troublesome businesses, before finally going ahead. The most obvious examples are two large paper mills, in Ontario, Canada, and Natal, South Africa, eventually sold for £36m and £37m respectively.

Rather than a sign of managerial vacillation, "this was partly the result of the more disciplined approach the company now takes to both divestment and diversification," says Jarratt. With the help of its "apples and pears" planning system, the board was armed throughout the three-year period with a series of detailed calculations of the cash flow and profit implications of selling a particular business at a particular price, and at a particular time. Without these, it might have been tempted to sell several businesses just as fast *as possible*, and at giveaway prices.

This is not to claim that Reed was able accurately to forecast the best time to sell its unwanted assets. Instead the planning system gave management an indication of the likely implications of shedding one business or another, in any one of a number of possible circumstances.

The often misunderstood difference between planning and *forecasting* is also illustrated by the case of a second Canadian mill, in Quebec. At one stage, Quebec was together with Dryden on the "for sale" list. Then, in 1978-79, came a sharp increase in profitability, thanks in large measure to a revival of the newsprint market and a slump in the parity of the Canadian dollar: since Quebec is a substantial exporter, this boosted its competitiveness and profitability.

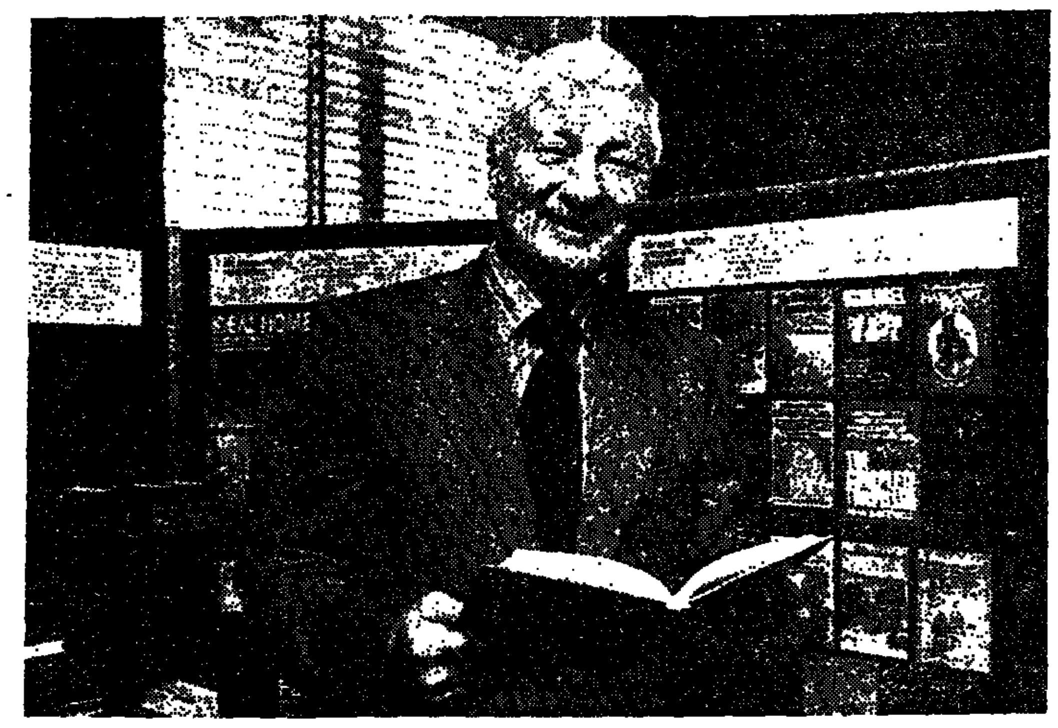
Quebec's improved performance contributed to a remarkable recovery of Reed's North American pulp, paper and packaging: from bare break-even in 1977-78, these North American operations turned in profits of £11m the next year, and more than double that amount in 1979-80, when their trading profit margin was nearly three times as high as that of the Reed empire as a whole.

None of Reed's planners would pretend they forecast the extent of Canada's recovery. It would be astonishing—and a fluke—if they had, given the impossibility of accurate forecasting in today's business environment. The important thing is that they detected the right trends and warned the management off selling Quebec for the moment—instead *encouraging* it to approve a major capital investment project aimed at increasing Quebec's profitability still further.

With pulp and paper still a sharply cyclical business, Reed *has not closed* the door on the sale of Quebec. But for the moment it slots into the corporate portfolio as a healthy "*cash cow*," with a high price tag for any potential purchaser.

What if—or when—the cycle again plunges downwards? Even if Reed's planners do not succeed in forecasting the *precise timing* and *shape* of the downturn, they will have alerted the management to the likely short- and long-term impact of the various options for Quebec.

This is just one example of what Jarratt calls "the what-if? syndrome." More explicitly, he argues that Reed's planning has enabled it to take decisions "in a more structured way, having worked out what the implications will be."



Sir Alex Jarratt, Reed's chairman and chief executive (top), says its new planning system helps the board judge between the relative value of its disparate businesses—"our apples and pears." At divisional level, Malcolm Glenn (below) finds it helps him to "take a deep breath and have another look" at problems and performance; it also clarifies his relations with the centre

Getting a tighter grip on the grass roots

"PLANNING IS not something detached from reality, that the long-haired boys do. It's a tool which forces you to think more deeply about the nature of the company you're managing. I don't know how you can run a business without trying to do it within certain sets of objectives, and ways of achieving them."

The speaker is Sir Alex Jarratt, one of Britain's most enthusiastic yet realistic senior advocates of corporate planning. His enthusiasm is self-evident in the priority he has given to planning at Reed International since he took over in 1975. His realism is echoed in his warning that planning cannot replace the intuition and "hunch" which are so important in decision-making; instead, he argues, it helps structure and channel them.

Jarratt's commitment to planning goes back to his days at the Treasury in the mid-1950s. But this is not to say that either he or his planners share the simplistic belief in single-line forecasts which have underpinned much of the misguided civil service planning of the past 20 years. One of the most intriguing elements of Reed's own planning is the way that alternative "scenarios" of the future are combined with a depth of statistical analysis which would be unacceptable to many top managers.

Jarratt recognises that it is the theoretical side of planning — "hockey-stick forecasting, and the rest" — which frightens many companies away from trying to mould their own future in a systematic fashion, even if this is the only way to avoid being swamped by all the unpredictable pressures of today's business environment.

With Reed now apparently poised on the brink of a new phase of expansion, both at home and abroad, Sir Alex's faith in the value of its planning effort faces a particularly stiff test. In the renewed search for a broader balance of businesses, in terms of both counter-cyclicality and greater international content, can long-term planning help the company avoid its own past problems and mistakes, and those of other enterprises?

Only time will tell, but Sir Alex is hopeful: "Planning helps to direct attention at the ways you might go, and to set up some priorities or combinations of strategy," he says, presenting a stark contrast in character with what many of his predecessor's critics — and admirers — call Lord Ryder's more intuitive style of managing Reed's expansion in the 1960s and early 1970s: some use the phrase "seat-of-the-pants."

It is the divestment phase of Reed's planning which has so far received most outside attention, at both conferences and business schools. And it will be Reed's current and unusually thorough analysis of diversification options which will attract most in the future.

Yet the most significant aspect of its planning is arguably its everyday impact. It is significant not only to Reed itself, but also to other companies which are trying to find ways of running their established businesses in a more disciplined way. Sceptics who argue that planning is an ivory-tower activity, of interest only to planners, chairmen and chief executives, should also have much to learn from Reed's experience.

Intrusion

Whereas planning for rationalisation and diversification can be a once-and-for-all effort, and in many companies is tailored to help decision-making only at board level, Reed's approach is intended to be broader and continuous. This means that it has had to be designed to involve and assist managers at various levels down the organisation, both at divisional level and below.

Thus when Jarratt says Reed's planning effort "has helped make us *more* surprise-free," he no longer applies the "us" just to his fellow-directors, as he would have done when the system was being introduced in 1977-78. "The divisions are increasingly understanding themselves," he says.

It would be surprising if it were otherwise, given the impetus of a strong and successful top management which not only places great emphasis on the need for self-questioning and what Jarratt calls "continuous renewal," but also carefully plots performance at sub-divisional level against its own very detailed idea of what each particular business should be able to achieve.

Sir Alex's contention that planning helps the divisions themselves is *certainly* reinforced by Malcolm Glenn's six-year experience in several Reed divisions, including his current tenure as the head of Decorative Products. But it also supports the view of a leading British business school academic that, whereas Jarratt is reputed for his "decentralised" organisational style, his planning system has actually shifted considerable management control to the centre.

Like most managers down the Reed organisation, Glenn reacted negatively at first to the increased intrusion and paper work associated with the new planning system. But he now says that it has brought divisional management two essential advantages.

First, "Reed has become a lot clearer about what sort of performance it wants from the divisions," both in general and in terms of specific performance measures (he quotes the definition of cash flow as one example).

Second, the system "makes you think much more clearly about whether you can meet those requirements, and if not, why not." This applies both to long-term strategy and to annual performance, he suggests. On the longer-term plane, Glenn argues that "it's quite useful to have something which forces you to stand outside your business, take a deep breath, and have another look."

As for the annual business plan, and the division's performance against it, he says Reed has become "increasingly robust about making you justify the existence of your business," and remains so "even now that they've got some money in the bank."

In the debt- and crisis-ridden days of 1977-78, when the planning system was just being introduced, this self-justification was required from each of the 60 businesses, as part of a process in which their existing plans had been matched against a series of alternative strategies prepared at the centre.

This was a herculean task for Reed's five-man planning team, even with the help of computers and a mass of information from outside sources. This included possible economic trends, and an analysis of the average (or "par") performance of an international cross-section of companies in every relevant industrial sector. (The operation of Reed's planning system will be examined in tomorrow's Management Page).

Radical

Now that strategies for each business have been agreed between Reed and the various divisions, the central planners [illegible] outline strategies for [illegible] only on an exceptional basis — normally when market or other environmental factors undergo a substantial change. "You don't expect a strategy to change that much. Otherwise, it isn't strategy," says John Chandler, Reed's Planning Director.

If the relationship between Reed and its divisions now has a stronger top-down component, so, in future, may that between some of the divisions and their individual businesses. At Decorative Products, for example, Malcolm Glenn is introducing what he calls "task planning" for his division's five main businesses. The tasks will be set at a central level, "so that people are forced to think, and a real dialogue can take place."

This is not the only part of Glenn's divisional recovery programme which resembles the route taken in 1977-78 by his parent company. Like Jarratt and John Chandler, he has instigated a "strategic analysis" of his division, redefining each activity into clearer market segments. "We're asking 'who buys our product, and for what purpose?'," says Glenn. "People in the division hadn't thought clearly in that way before. It's likely to produce some pretty radical conclusions."

It is the unusually fast-moving nature of Glenn's consumer markets that make him so keen to secure greater flexibility in the way his divisional plan is handled at the centre. Incorporating targets for each of the division's businesses, the plan is sent to headquarters each December for scrutiny and possible amendment in discussion. The actual business plan review is held in March, just before the start of the financial year. "By June it could be out of date," says Glenn.

While deviations from plan *are obviously permitted*—with the agreement of headquarters—the original plan is not actually revised. This is the change Glenn advocates, though he insists that there can be *no* question of allowing such changes without the usual, "often pretty rough," debate between the division and the centre. "The day you easily get a plan variation is the day you destroy the whole system—the corporate entity would lose control."

Divisional managers in many other companies would echo Glenn's view of this dilemma: "We want the flexibility; the centre needs the control." But few central managements can have had such a salutary recent experience as Reed's of losing grip over a subsidiary. As Glenn points out, it was the problems of a relatively small subsidiary, Reed Paper in Canada, which made a major contribution to its debt mountain.

By the same token, it was the debt crisis which helped create the classic circumstances in which radical change of any kind (in this case a new planning system, and tighter control) can be introduced into a company. *Not only* was Reed facing a crisis, but it had a strong new chief executive who identified himself forcefully with the new concept. And there was his largely new team of senior managers, who "were not committed to defending the past," to quote John Chandler. Finally, Chandler's planners themselves were starting with a clean slate; none had worked at the centre of Reed before.

Many companies have tried to introduce radical new planning and control systems without the impetus of all these four factors—of those already featured in this series of articles, Ciba-Geigy and Shell are two examples — but few have achieved a lasting success without at least one of them.

As with Shell in particular, Reed seems to have succeeded—so far at least—in using its planning system as a catalyst for something far broader than just a more effective planning process — namely a frequent *questioning of assumptions* and performance. To quote Sir Alex Jarratt, it is bringing "not only a *sharpening* of the (management) system, but a *different* way of thinking."

C.L.

LOMBARD

The delusion of exchange rates

BY SAMUEL BRITTAN

LET US suppose that the Chancellor of the Exchequer were to make a surprise announcement saying "I have instructed the Bank of England to intervene in the foreign exchange market to reduce the competitive disadvantage suffered by British exporters at present exchange rates" and added that this took precedence over the monetary guidelines.

I must emphasise that this is a thought experiment. It is the exact opposite of what Sir Geoffrey Howe has actually said. Moreover Sir Geoffrey would never have used the verb "instruct" in front of "Bank of England." But such an announcement would be received with such delight by so many industrialists and trade unionists that the argument is worth pursuing.

Doubtless the initial impact would be a fall in sterling—perhaps by much more than anyone bargained for. By creating the sterling to buy up foreign currency, the Bank could ensure that the depreciation *was no flash in the pan*, but went on and on. Even then it is highly likely that producers would find that their competitive improvement was purely temporary, and that not many years later they would find themselves at the same competitive disadvantage, but suffering it at a lower nominal exchange rate and higher inflation rate.

The table brings out very clearly the difference between

NOMINAL AND REAL EXCHANGE RATES
% Changes 1973 to 1979

	Effective spot rate	Effective real rate
Switzerland	+67	+16
Germany	+36½	+4
Austria	+18	+8
Japan	+15	−3
U.S.	−2	−5
France	−10	−3
UK	−27	+19
Italy	−45	−7

the nominal—or effective spot-exchange rate—and the real rate. The latter is adjusted for the relative movement of prices in each country and its main competitors. The index used is domestic wholesale prices of non-food manufactures, averaged among countries on a trade weighted basis.

It can be seen that the two kinds of rate are entirely different animals. The yen as measured in the foreign exchange market appreciated by 15 per cent between 1973 and 1979. But the real exchange rate showed a modest depreciation. Sterling on the other hand depreciated by 27 per cent in nominal terms taking the six year period together, but there was nevertheless a real appreciation of 19 per cent.

Switzerland stood high in both the nominal and the real appreciation stakes. *The German* mark experienced a hefty 36½ per cent nominal appreciation, but only a modest 4 per cent real appreciation. No wonder German industrialists suffered so little, for all their loud-voiced complaints. Nor was there even all that much year to year variability in the real value of the mark. The "standard deviation" of the latter from its trend was only about 3 per cent. The biggest deviations—in the 8 per cent to 9 per cent range—were experienced by Switzerland and Japan.

The exact figures are sensitive to the weighting systems used. They may in particular understate the nominal depreciation of the U.S. dollar, because of the high weighting given to its Canadian counterpart. But alternative calculations would not upset the general conclusions.

The table is taken from a paper on exchange rate policy by Prof. P. Korteweg of Erasmus University, Rotterdam. Indeed the main interest lies not in the figures, but in the explanations provided. In extreme brevity they are that exchange rate changes are required both to offset international inflation differences and to allow for international shifts in sectoral productivity and trading patterns. It is the changes in the latter—of which the impact of North Sea oil is the headline example — which account for the difference between real and nominal exchange rate changes.

It took a decade of stagflation to convince people that there was no enduring trade-off between inflation and unemployment. Must it take another decade to make us learn that there is no exchange rate policy which will "improve" international competitiveness in the face of real forces acting the other way?

Euro-law affects UK immigration rules

WHATEVER comfort there may be for the bureaucrat in the House of Lords' decision in *Zamir v. Secretary of State for the Home Department*,* which imposes upon the intending immigrant an absolute duty to disclose to the immigration officer everything relevant to his immigrant status and history, the immigration authorities are not getting things all their own way. Earlier this month, the European Court of Justice at Luxembourg in *Regina v. Pieck* has in effect struck down the Home Officer's procedure for dealing with migrant workers from the EEC who enter through our ports.

If anyone in the early 1970s consoled a doubting British public that our joining the Common Market would affect only our *economic laws and could never* have any legal effect upon our criminal laws—and many legal luminaries did just that—he must now eat his words. For the decision in *Pieck* has effectively ruled that a criminal offence under the Immigration Act 1971 cannot be applied to an EEC worker in this country; and to the extent that the offence might still be available it cannot in any event lead to a sentence of imprisonment even though the UK Parliament made the offence imprisonable.

Section 24 (1) (b) of the 1971 Act makes it an offence for any alien (since 1971 the alien is described as a non-patrial) to overstay his leave in this country; the offence is punishable with a fine of not more than £200 and/or with imprisonment for not more than six months. In May last year, Mr. Pieck was charged under that section before the Stipendiary Magistrate at Pontypridd Magistrates' Court, and a "notice as regards liability to deportation" was served.

Mr. Pieck is a Dutch national and a holder of a Dutch passport. He first entered this country in August, 1973, and subsequently left and re-entered. In April, 1976, his passport was renewed at the Dutch Embassy in London, on which occasion he gave his residence as Cardiff. He entered this country again in December, 1977, left in July, 1978, and entered one week later on July 29, 1978.

On each occasion that he entered the UK, his passport was stamped by an immigration officer with the date and place of entry into this country and with an endorsement consisting of the words "Given leave to enter the United Kingdom for six months." At all times since his entry, Mr. Pieck has worked as a printer for Graphic Prints at Taffs Well, near Cardiff. The limited leave granted on July 29, 1978, expired on January 29, 1979. In March, 1979, Mr. Pieck went, of his own accord, to the South Wales Constabulary, explained that he had overstayed his leave, and asked for advice. He was advised to send his passport to the Home Office, together with an application for a further stay; but he did nothing. The next he heard about his case was when he was required by a police officer to produce his passport. He explained to the officer that he has been going to send it off but forgot. He was then charged with the offence of staying in this country beyond January 29, 1979.

Last July, he appeared in court and pleaded not guilty. His counsel, Mr. Alan Newman (who has had some experience of taking cases to Luexmbourg) argued that the stamp in the

THE WEEK IN THE COURTS

BY JUSTINIAN

passport amounted to an "entry visa or equivalent document" which is prohibited as a requirement for an EEC worker entering the territory of a Common Market country. Mr. Pieck's counsel also argued that his client had a right to move freely within, and stay in, the United Kingdom for the purposes of employment, and that the purported grant of leave to enter the United Kingdom limited to six months was in derogation of those rights. He added that, even if the initial leave imposed on entry was permissible, breach of it could not be punished either by deportation or imprisonment. The stipendiary magistrate at Pontypridd readily referred questions of interpretation of EEC law to the European Court.

The Home Office explained to the European Court that the object of giving an EEC worker a limited leave to enter was to avoid delay at the port of entry. It avoided the immigration officer having to examine each national of a member State as he arrived in order to ascertain whether the purpose of his coming to the United Kingdom was one giving him a right of entry under the Treaty of Rome. It meant that there was a period of six months in which an entrant could decide whether he wished to remain longer (as he was entitled to do) and, if appropriate, to apply for a residence permit. However sensible that system may be for a country like the United Kingdom that does not issue identity cards and has no registers of its population, nor requires aliens to register with the police other than in certain cases, it does not unhappily accord with EEC law.

This was characteristic of the Home Office's soundly cavalier approach to the case.

The Government first argued that the phrase "entry visa" meant exclusively a *documentary* clearance issued before the traveller leaves the country of embarkation and arrives at the frontier of the disembarking country in the form of an endorsement on his passport or of a separate document. An endorsement on the passport at the moment of entry giving leave to enter was, it was claimed, not to be regarded as an entry visa. That contention was firmly rejected. The court held that "entry visa" covered any formality for the purpose of granting leave to enter, whatever may be the place or time at which that leave was granted and in whatever form it was granted. The Home Office will now have to abandon its practice of granting an EEC worker a limited leave to enter, because, the court went on to say, any such limitation is incompatible with the EEC law conferring the freedom of movement to workers within the EEC.

The third question answered by the court is perhaps the most startling to the English bureaucrat, and impinges most upon the English law relating to immigration control. The question asked was whether an EEC national who has overstayed the leave granted in a residence permit, which the various countries may properly insist that the worker obtains, may be punished by imprisonment and or deportation. In an earlier decision in 1977, the court had already said that penalties *cannot be imposed* in so far as an alien does not comply with national provisions prescribing possession of a *general* residence permit. But what about the failure to obtain a *special* residence permit, possession of which may be imposed on an EEC worker?

The court positively ruled out any deportation for failure to obtain the special residence permit. But it said that the national courts could impose penalties for failure to comply with the terms of provisions relating to residence permits comparable to those attached to minor offences committed by nationals. That did not justify imposing a penalty so disproportionate to the gravity of the infringement that it became an obstacle to the free movement of EEC workers. Imprisonment would always be disproportionate.

The denouement will be played out when the matter comes before the Pontypridd Stipendiary Magistrates in the coming weeks. He will have first to say whether the offence of overstaying one's leave can apply to Mr. Pieck. The European Court's judgment indicates that there is no such offence at all applicable to an EEC worker to stay beyond the time for which leave to enter is granted. Any limitation has no legal validity. But, even if the magistrate upholds the charge, Mr. Pieck cannot go to prison or be recommended for deportation. Thus, the tide of European law has washed away one little corner of our criminal law.

* *Times Law Report, 17 July 1980.*

Sea Pigeon poised to win

RACING

BY DOMINIC WIGAN

THE EXTRAORDINARY Sea Pigeon, who is poised to overhaul Boldboy's record earnings for a gelding on the Flat in this country, comes out again at Ayr today. Already three times a winner here, Pat Muldoon's 10-year-old bids for his third course and distance victory in the mile and seven furlongs Tennent Trophy.

Only four—Move Off, Russian George, Remezzo and Rheinman—stand between Jonjo O'Neill's mount and victory. However, success for Sea Pigeon could be hard to come by, for Russian George poses a formidable obstacle on their running in the Coral Northumberland Plate at Newcastle. In that two-mile event Russian George came with a wet sail in the closing stages to take second place, half a length behind Mon's Beau; while Sea Pigeon—attempting to give Russian George 23 lbs—finished fourth.

This afternoon Sea Pigeon re-opposes Russian George on 4 lbs better terms and, with a shorter trip to his advantage, I believe he will gain his revenge.

Although the Gordon Richards youngster, Joint Mercy, has yet to make the winner's enclosure, his three runs to date show him to be a northern two-year-old of above *average ability. It will be both* surprising and disappointing if he cannot make his pace tell against some modest rivals in this Tam O'Shanter Stakes from which Steel Pass is an absentee.

Another useful performer who can get off the mark today following several place efforts is Souliotissa, among the runners for the St. Quivox Stakes. Recently this Captain Rogers-owned What A Pleasure filly failed by just a neck to open her account at Newcastle.

AYR
3.00—Joint Mercy***
3.30—Sea Pigeon**
4.00—Bertram Personnel
4.30—Souliotissa
5.00—Lana's Secret

WOLVERHAMPTON
2.15—Hot Press
4.15—July The Fourth

WINDSOR
6.30—Think Ahead
8.20—Remainder Imp
8.50—Salthouse*

TV/Radio

† Indicates programmes in black and white

BBC 1

6.40-7.55 am Open University (UHF only). 9.55 Noah and Nelly. *10.00 Jackanory.* 10.15 Tarzan, Lord of the Jungle. 10.35 Why Don't You? 1.30 pm Heads and Tails. 1.45 Midday News. 2.05 Your Songs of Praise Choice. 2.40 "Oklahoma." Film musical. 4.55
4.55 Olympic Grandstand: Swimming, diving and gymnastics.
5.40 Evening News.
5.50 Olympic Grandstand.
7.15 Ask the Family.
7.40 Comedy Classic: The Good Life.
8.10 Panorama: Britain's nuclear armoury.
9.00 Nine O'Clock News.
9.25 The Monday Film: "Billy Two Hats," starring Gregory Peck.
11.05 The Editors.
11.45 Weather/Regional News.

All Regional programmes as BBC-1 except as follows:—

Cymru/Wales — 1.30-1.45 pm Tredwt. 7.15-7.20 Wales Today. 7.20-7.45 Farming in Wales. 7.45-8.10 Heddiw. 11.45 News and Weather for Wales.

Scotland—1.25-1.30 pm Scottish News. 11.45 News and Weather for Scotland.

Northern Ireland—11.45 pm News and Weather for Northern Ireland.

BBC 2

6.40-7.55 am Open University.
11.00 Play School.
4.15 pm Play School.
4.40 Shake, Rattle and Roll.
4.45 Newsround.
4.55 Go With Noakes.
5.25 Fred Basset.
5.30 Wedding Yells.
5.50 Nationwide.
6.15 "Shenandoah": film starring James Stewart.
8.00 Mid-evening News.
8.10 Dallas.
9.00 Rhoda: "Lady's Choice."
9.25 Brass Tacks.
10.10 Best of Brass.
10.45 Newsnight.
11.35 Open University.

BBC-2 Wales—5.50-6.15 pm Wales Today.

BBC-2 Scotland—5.50-6.15 pm Reporting Scotland.

BBC-2 Northern Ireland—5.50-6.15 pm Scene Around Six.

BBC-2 England only—5.50-6.15 pm Look East (Norwich); Look North (Leeds, Newcastle); Look Northwest (Manchester); Midlands Today (Birmingham); Nationwide (London and South East); Points West (Bristol); South Today (Southampton); Spotlight South West (Plymouth).

LONDON

9.30 am Check It Out. 10.00 Wild, Wild World of Animals. 10.25 Mystery Island. 10.40 The World We Live In: "After the Whale." 11.05 Little House on the Prairie. 11.55 The Animates. 12.00 pm Chorlton and the Wheelies: "The Royal Wheelyworld Pipe Band." 12.10 Rainbow. 12.30 Doctor. 1.00 News at One. 1.20 Thames News. *1.30 Crown* Court. 2.00 Against the Wind (Episode 13). 2.30 Monday Matinee: "Nobody Runs Forever"
4.15 Clapperboard.
4.30 Olympics '80.
5.50 ITN News.
6.00 Olympics '80.
7.00 Thames News
7.30 Coronation Street.
8.00 Grundy.
8.30 World in Action.
9.00 Best Sellers: "The French Atlantic Affair."
10.00 News at Ten followed by Thames News Headlines.
10.30 Best Sellers (continued).
12.15 am Close: Cyril Luckham reads Lord of the Evening.

All ITV regions as London except at the following times:—

ANGLIA

10.00 am Something Special. 10.50 Child Life in Other Lands. 11.20 World Worth Keeping. 11.45 Cartoon Time. 1.20 pm Anglia News. 2.00 About Britain. †2.30 Monday Film Matinee: "Lust For Gold." 7.00 About Anglia. 10.00 News followed by Anglia Late News. 12.15 am Reflection.

ATV

10.25 am Sesame Street. 11.20 The Paper Lads. 11.45 Larry the Lamb in Toytown. 1.20 pm ATV Newsdesk. *2.00 About Britain.* *2.30 The Best of* Sellers: Dr. Strangelove. 7.00 ATV Today. 12.15 am Something Different.

BORDER

10.00 About Turn. 10.25 How the West Was Won. 1.20 pm Border News. 2.00 About Britain. 7.00 Lookaround Monday. 7.15 Photography. 10.00 News and Border Weather. 12.25 am Border News Summary.

CHANNEL

1.20 pm Channel Lunchtime News, What's on Where and weather. 2.00 About Britain. 2.30 The Monday Matinee. 7.00 Channel Report. 10.28 Channel Late News. 12.15 am News and weather in French.

GRAMPIAN

9.25 am First Thing. 10.00 About Turn. 10.25 How the West Was Won. *1.20 pm North News.* *2.00 About* Britain. 2.30 The Monday Special: "New York City Ballet." 3.30 Survival. 4.00 Casper the Friendly Ghost. 7.00 North News and weather. 7.10 Bailey's Bird. 12.20 am Reflections. 12.25 North Headlines.

GRANADA

10.00 am The Beatles. 10.15 Wildlife in Crisis. 11.00 Sesame Street. 1.20 pm Granada Reports. 2.00 About Britain. 2.30 Monday Matinee. 7.00 Granada Reports. 12.15 am Superstar Profile.

HTV

10.00 am The Human Face of China. 10.25 The Lost Islands. 10.50 Sesame Street. 11.50 Larry the Lamb in Toytown. 1.20 pm Report West Headlines. 2.00 About Britain. †2.30 The Monday Matinee. 7.00 Report West. 10.28 *HTV News.*

HTV Cymru/Wales—As HTV West/HTV General Service except:—12.00-12.10 pm Trehetiau. 1.20-1.25 Penawdau Newyddion y Dydd. 1.25-1.30 Report Wales Headlines. 2.00-2.30 Hemdden. 7.00-7.15 Y Dydd. 7.15-7.30 Report Wales. 8.30-9.00 Yr Wythnos.

SCOTTISH

10.00 am About Turn. 10.25 How the West Was Won. 1.20 pm News and weather. 2.00 About Britain. 2.30 Monday Matinee: Tarzan And The Great River. 7.00 Scotland Today News and High Summer Extra. 10.00 News and Scottish News Headlines. 12.15 am Late Call.

SOUTHERN

10.00 am Focus on Wildlife. 10.25 Little House on the Prairie. 11.20 History of the Motor Car. 11.45 Larry the Lamb. 1.20 pm Southern News. 2.00 Houseparty. 2.25 Future Cop. 3.45 About Britain. 7.00 Day by Day. 10.00 News followed by Southern News Extra. 12.15 am Weather followed by A Woman For All Seasons.

TYNE TEES

9.20 am The Good Word and North East News. 9.30 The Masterbuilders. 9.55 The New Ed Allen Show. 10.20 The White Stone. 10.45 *Bill Burred* Documentary. 1.20 pm North East News and Lookaround. 2.00 About Britain. 2.30 The Mackenzie Affair. 3.30 Bloomin' Human. 3.45 Kum Kum. 7.00 Northern Life. 12.15 am The Strength of the Hills.

ULSTER

10.00 am About Turn. 10.25 The Lost Islands. 10.55 Sesame Street. 1.20 pm Lunchtime. 2.30 Monday Matinee: "The Angry Silence." 4.13 Ulster News Headlines. 7.00 Ulster Television News. 7.15 Portrait of the Artist. 10.29 Ulster Weather. 12.15 am Bedtime.

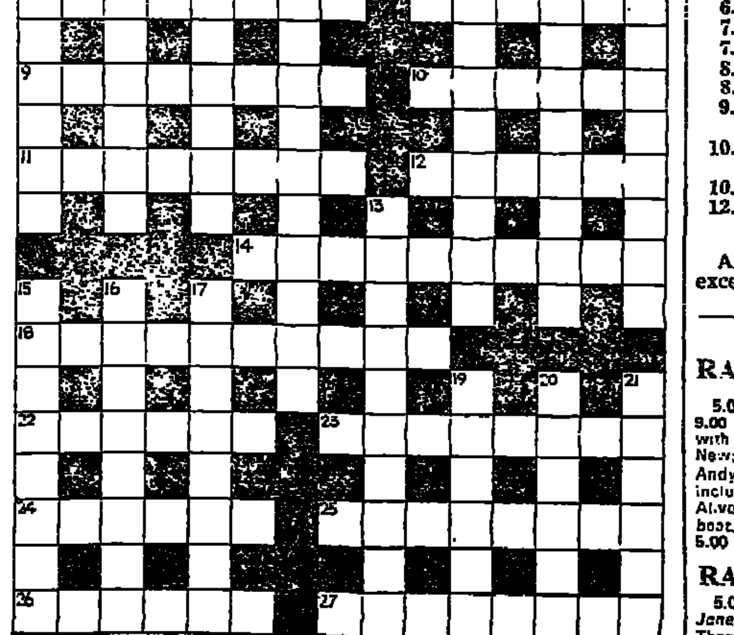
WESTWARD

10.00 am About Turn. †10.25 Laurel And Hardy's Laughing Twenties. 1.20 pm Westward News Headlines. 2.00 About Britain. 2.30 The Monday Matinee: "Stranger On The Run." 4.12 Gus Honeybun's Birthdays. 7.00 Westward Diary. 10.31 Westward Late News. 12.15 am Faith for Life. 12.20 West Country weather forecast.

YORKSHIRE

10.25 am Oliver and the Artful Dodger. 11.10 Young Ramsey. 1.20 pm Calendar News. 2.00 About Britain. †2.30 Monday Matinee: "No Highway in the Sky." 7.00 Calendar (Emley Moor and Belmont editions). 12.15 am George Hamilton IV.

F.T. CROSSWORD PUZZLE No. 4,327



ACROSS
1 What steeplejacks and fashionable society enjoy (4, 4)
5 Inlaid work of biblical character (6)
9 Propellor that ventilates ship's company (8)
10 Church official giving gender to name initially (6)
11 Part of New York set aside for redevelopment (4, 4)
12 Upper-class fur that may be employed (6)
14 Pudding for Dalmatian (7, 3)
18 Everybody there admitting silver is fashionable (3, 3, 4)
22 Choral work from a book with a border (6)
23 Sweet and sour small quantity of liquid (4, 4)
24 First course for a beginner (6)
25 Continental coach creating wit on literature (5-3)
26 The French examination is most up-to-date (6)
27 Opportunity to go to railway and court (8)

DOWN
1 Practical joker making hybrid ox hear (6)
2 Gaudy fish, I hush (6)
3 Place on top of table for insect (6)
4 Racing, for example, and stops ball with wine (5, 5)
6 Superintendent left remaining to observe direction (8)
7 Insect I give form to make a toxic neutraliser (8)
8 Steer to edge and come together (8)
13 *Contrive dramatically* to instruct and transport (10)
15 Dressing a boy in soil (5, 3)
16 Policemen measure beneath apartment (4-4)
17 Being barefooted, she loses badly (8)
19 Be in contact with notice and become a member (6)
20 Cook start of entree on metal grid (6)
21 Speckled crock in filthy place (6)

The solution of last Saturday's prize puzzle will be published with names of winners next Saturday.

RADIO 1

(S) Stereophonic broadcast

5.00 am As Radio 2. 7.00 Mike Read. 9.00 Peter Powell. 11.00 Simon Bates with the Radio 1 Roadshow. 12.30 pm Newsbeat. 12.45 Paul Burnett. 2.00 Andy Peebles. 4.31 Richard Skinner, including 5.30 Newsbeat. 7.00 Stayin' Alive. 8.00 Jaye Cooper. 9.50 Newsbeat. 10.00 John Peel (S). 12.00-5.00 am As Radio 2.

RADIO 2

5.00 am News Summary. 5.03 Steve *Jones (S) including 6.15 Pause for* Thought. 7.32 Terry Wogan (S) including 8.27 Racing Bulletin, 8.45 Pause for Thought. 9.03, 10.03 Sports Desk. 10.03 Jimmy Young (S) including 11.03, 12.03 Sports Desk. 12.08 pm Ray Moore (S) including 1.03, 1.45, 2.03, 2.45 Sports Desk. 3.03 Olympics 80 with John Dunn: Sporting action from Moscow, plus music. 7.02 Much More Music (S) including 7.30 Sports Desk. 8.02 Folk On 2 (S). 9.02 Humphrey Lyttelton (S) with the Best of Jazz. 9.55 Sports Desk. 10.02 Pop Score. 10.30 Star Sound. 11.02 Olympic Sports Desk. 11.15 Brian Matthew with Round Midnight, including 12.00 Midnight Newsroom. 2.02-5.00 am You And The Night And The Music (S) with Geoff Bennett.

RADIO 3

‡Medium Wave

‡6.55 am Weather. 7.00 News. 7.05 Overture Concert: J. C. Bach, Handel, Vivaldi, Respighi (S). 8.00 News. 8.05 Morning Concert: Glinka, Rimsky-Korsakov, Chaikovsky, Glazunov (S). 9.00 News. 9.05 This Week's Composer: Sibelius (S). 10.00 By Arrangement With The Composer: Violin and Piano recital (S). 10.45 Music for Guitars: Sor, Corelli, Granados, Falla (S). 11.15 New Songs for Counter-Tenor. Recital: Ross Edwards, Colin Matthews (S). 11.45 Three Concertos (S) by Vivaldi, Liszt, Haydn including 12.20-12.25 Interval Reading. 1.00 pm News. 1.05 Musica Aurea Ensemble (S) Elizabethan music, including 1.45-1.50 Interval Reading. 2.30 Matinee Musicale (S). 3.30 New Records of music by Johannes Bernardus van Bree, Pfitzner, Shostakovich, Loewe, Brahms. 4.55 News. 5.00 Mainly for Pleasure with Richard Graves (‡ only from 6.20). 7.00 Haydn (S). 7.30 Concert: Schnittke (in place of Proms). 8.25 America as Myth and Reality. 8.45 Concert: Mozart, Bruckner. 9.40 Promenades. 10.05 Music for Lutes. 10.30 Jazz in Britain (S). 11.00 News. 11.05-11.15 Poulenc.

VHF only—Open University: 6.00-7.00 pm. For students in Radio Scotland and Radio Cymru areas only 12.00 Midnight-1.00 am.

RADIO 4

6.00 am News Briefing. 6.10 Farming Week. 6.25 Shipping forecast. 6.30 Today, including 6.45 Prayer for the Day; 7.00, 8.00 Today's News; 7.30, 8.30 News headlines; 7.45 Thought for the Day. 8.35 The Week on 4. 8.45 *John Ebdon with the BBC Sound* Archives. 9.00 News. 9.05 Start the Week with Melvyn Bragg. 10.00 News. 10.02 From Our Own Correspondent. 10.30 Daily Service (S). 10.45 Story Time: "Moon in the Cloud." 11.00 News. 11.05 The Queen Mother: A radio biography. 11.50 Weigh-In: Facts and fallacies of dieting. 12.00 pm News. 12.02 You and Yours. 12.27 Brain of Britain 1980 (S). 12.55 Weather. 1.00 The World at One. 1.40 The Archers. 1.55 Shipping forecast. 2.00 News. 2.02 Woman's Hour. 3.00 News. 3.02 Listen With Mother. 3.15 Afternoon Theatre: "Love on the Dole" by Ronald Gow (S). 4.45 Short Story. 5.00 PM: News. 5.50 Shipping forecast. 6.00 The Six O'Clock News. 6.30 Rumpole (S). 7.00 News. 7.05 The Archers. 7.20 Science Now. 7.45 The Monday Play: God's Chosen Children. 9.15 *Crowdie and Cream: Finlay J.* Macdonald on his Hebridean boyhood. 9.30 Kaleidoscope. 10.00 The World Tonight. 10.30 The News Quiz (S). 11.00 A Book at Bedtime: "Summer Lightning." 11.15 The Financial World Tonight. 11.30 Today in Parliament. 12.00 am News. 12.15-12.23 Shipping forecast.

VHF—11.30 pm Open University.

Radio Wavelengths

1	1053kHz/285m 1089kHz/275m 693kHz/433m	3	1215kHz/247m & 90-92.5vhf stereo
2	909kHz/330m & 88-91vhf stereo	4	200kHz/1500m & 92.95vhf

BBC Radio London: 1458kHz, 206m & 94.9vhf
Capital Radio: 1548kHz, 194m & 95.8vhf
London Broadcasting: 1151kHz, 261m & 97.3vhf

BBC Radio London

5.00 am As Radio 2. 6.30 Rush Hour. 9.15 Entertainment in Town. 10.03 The Robbie Vincent Telephone Programme: News, humour, advice. 1.03 pm London Live, including 3.15 Swap Shop. 4.30 London News Desk. 5.35 Look, Stop, Listen. 7.03 Black Londoners. 8.00 Question Time from the House of Commons. 9.00-5.00 am Join Radio 2.

London Broadcasting

6.00 am AM: Bob Holness and Douglas Cameron. 10.00 Brian Hayes. 12.00 Max Miller: LBC Reports. 2.00 pm Sue Jameson. 4.00 Max Miller. 6.00 Alan Clark. 8.00 After Eight Special. 9.00 Mike Dickin—Nightline. 12.00 LBC Reports Midnight. 1.00 am Night Extra: Tara Jefferies.

Capital Radio

6.00 am Mike Smith's Breakfast Show (S). 9.00 am Michael Aspel (S). 12.00 Mike Allen (S). 1.00 pm London Today First Report (S). 1.10 Mike Allen continued . . . 3.00 Roger Scott (S). 7.00 London Today (S). 7.30 Adrian Love's Open Line (S). 9.00 Alan ("Fluff") Freeman (S). 11.00 Tony Myatt's Late Show (S). 12.40 am Peter Young's Night Flight (S).

THE ARTS

Glyndebourne

Die Zauberflöte

by ARTHUR JACOBS

Two happy returns, and one not quite so happy, mark the changed cast which is now to be seen in this highly intelligent and successful production by John Cox.

Benjamin Luxon, who appeared as Papageno when the production was new in 1978, shows himself again the almost perfect interpreter of the role. There is a ceaseless, spontaneous-seeming animation in this Papageno — occasionally whistling his five-note theme, instead of playing it on his pan-pipes, or trying to relieve a ritual ordeal of silence by some impromptu bird-imitations. His vocal strength and subtlety are as admirable as ever, and, in combining comedy and pathos, the only thing he lacks which Geraint Evans had is a capacity to "milk" the audience's sympathy before the proposed suicide—easier, of course, when the opera is performed in the audience's tongue, but not impossible even across a language barrier.

Bernard Haitink, the conductor in 1978, was no less welcome back. Once past an uncharacteristic smudge of melody in the opening bars of the overture, his performance had the resource to bring both the weight and the rhythmic spring which the score needs. The woodwind of the London Philharmonic Orchestra responded with a ravishing realisation of the opportunities which Mozart provides.

Isobel Buchanan's return to the role of Pamina left me less satisfied. This much-commended young soprano—she is only 26 this year—gave out some beautiful phrases, some less beautiful, and was inclined to push her upper notes. In the initial recognition scene between her and Ryland Davies, it was Mr. Davies' utterance that thrilled, and her acting of the fragile role failed to touch its centre.

Ryland Davies' full-voiced, nobly portrayed Tamino, and Rita Shane's exceptional Queen of the Night (no mere possessor of freakish high notes but a commanding dramatic figure) continue to adorn the cast and Glyndebourne's care over minor roles is fully sustained in the excellence of Hugh Hetherington's Priest. The production may be inevitably known (as Nicholas Kenyon suggested in his initial review) as "the David Hockney Zauberflote," with its fantastic animals and its striking scenic perspectives, but I shall remember it for many more pleasures than those.

Covent Garden

The Song of the Earth

by CLEMENT CRISP

An important fact in performance of *The Song of the Earth* is that its interpreters are very exposed. There is no fancy costuming, no opportunity to beguile the audience and corrode the text with acting, or by making delicious capital out of personality. The dancers dance, and if they are honest the choreography speaks through their bodies. So seemingly bare is MacMillan's manner that any attempt by a dancer to fill it out, to "interpret" the movement, destroys the work. But if, as on Friday night when *Song* returned to the repertory, the cast trust the ballet and submit themselves to it, then the result is very fine. With Monica Mason as the Woman, David Wall as the Man, and Anthony Dowell as the Messenger, with a high-powered supporting group led by Vergie Derman, Jennifer Penney and Wayne Eagling, we saw a grave account which caught all the expresssive force of this most serious ballet.

There is nowhere the sense, so clear in interpretations by Marcia Haydee, Richard Cragun and Egon Madsen, that the three principals belong inalienably together: this can only result from a cast working regularly as a team, and from that comradeship in emottion which is Stuttgart's special quality. On all other counts, though, Friday's presentatiton was committed, deeply communicative.

Monica Mason has ever been able to seem the focus of the ballet's experience. In the last song—The Farewell—she took us along the dark path that the Woman treads, and after what must have been a huge summoning of psychic and psysical energy, poured out its final torrent of *pas de bourrée* as an heroic statement in the face of desolation.

David Wall, playing with dedicated simplicity, gave the Man an unassuming dignity that is exactly right—the only kind of "acting" which the ballet can sustain. Anthony Dowell effortlessly conveyed the inhuman quality of the Messenger: not a matter of the half-mask hiding his features, but of dancing given a complete inevitability. I thought Jennifer Penney better than ever in the scherzo "of Youth," enchanting in the sweetness of her dancing. And despite some rough edges, Mahler's symphony for voices received a purposeful performance under Ashley Lawrence.

Enigma Variations completed the programme. For all the Royal Ballet's authenticity of style, there now seems a tendency to wallow in the emotions that surround the figure of Elgar. The economy with which Monica Mason and Leslie Edwards present their characterisations is still admirable; for some other members of the cast the dictum "less is more" might suggest a control of means which would prevent the ballet becoming sentimentalised and quaint.

Holland Festival

Soldiers' Mass

by CLEMENT CRISP

There was a time when the Nederlands Dans Theater was a regular visitor to Britain. Through good years, which were very good, and bad—at the time of the company's last appearances here, with a repertory riddled with feeble American experiments—NDT has held our affections. Since the last London season in 1975, the troupe has developed a markedly different identity, thanks to the choreographies of its director, Jiri Kylian. Czech born, a Royal Ballet School student, a dancer with the Stuttgart Ballet, Kylian has brought a new dynamism to NDT's dance manner. I recently saw his latest work, *Soldiers' Mass* (a setting of Martinu's *Field Mass*), during the Holland Festival.

Kylian's style here, is in certain other of his ballets, has a high energy level, dance dedicated to the proposition that bodies are to be used to the full. There may seem little that is below a *mezzo-forte* in such pieces, and much that is *fortissimo* in dynamics. *Soldiers' Mass* is written for 12 men, clad in khaki-green shirts and with trousers that end in vestigial gaiters, who are treated for the most part as a military squad. By insisting upon groupings that evoke the disciplined formations of men in batle, and a consequent community of feeling, the occasional emergence of a single figure from the urgent racing of the men conveys the loneliness and dread of the individual in combat.

The high-voltage action, characteristic of the piece, explores the tensions and alertnesses of war. A closing coup de theatre, in which the men tear off their sweat-soaked shirts and stand motionless, stresses their vulnerability, further accentuated when they clasp their faces in agonised prayer and collapse to the ground.

Made with undeniable zeal, *Soldiers' Mass* receives dedicated, unsparing performance. One soloist, Chris Jensen, appears as a fleet, fraught victim of the tempest of battle and the no less tempestuous matters of faith that are the text of the Mass, seeming especially piteous as he darts among his companions, then swings from the arms of two comrades. Musically the performance was excellent, with Utrecht Symphony and the Slovene Philharmonic chorus under David Porcelijn, and Bernard Kruysen a noble baritone soloist.

These same forces (minus Kruysen) gave a brave account of the Stravinsky *Symphony of Psalms*, but—thanks to a seat nestling amid the skirts of the ladies of the choir—I saw but half the stage, and my view of Kylian's energetic choreography allows no comment.

On the other work in the programme I can, alas, report fully. This was *Youth's Memories* by the Swedish dancer Mats Ek, which is one of those ballets about unhappy teen-agers—inevitably including a couple who discover copulation before our very eyes, and a sensitive boy who gets left out of all the fun. There used to be a fashion for such dreary epics 25 years ago in work-shop evenings of dance. The present example compounds its crimes of flat choreography and stale emoting with a gratuitous assault on Bartok's second piano concerto. The only merit of the event was to let us hear Daniel Wayenberg's strongly pulsed account of the score.

The Stuttgart Ballet and various post-Modern American experimentalists were also part of the Festival. Stuttgart's programmes allowed me to catch up with John Neumeier's *Lady of the Camelias* which dates from 1978. Well designed by Jurgen Rose, this takes three acts to do what Ashton achieves in 25 minutes with *Marguerite and Armand*.

Narrative matters are complicated by a parallel drawn between Dumas' lovers and Manon Lescaut and des Grieux. This conflation is cleverly devised, and the enterprise is well intentioned, imperfectly pinned into a mass of Chopin music, and extraordinarily bland. I saw Richard Cragun and Birgit Keil as the lovers, both working like beavers; my emotions were not touched once.

Bowling Green and Vanbrugh's Belvedere Tower at the restored Claremont garden

Architecture

An 18th century garden

by COLIN AMERY

Claremont garden covers about 50 acres and is one of the earliest surviving examples of a man-made "natural garden." The first scheme was laid out by Sir John Vanbrugh and Charles Bridgeman between 1715 and 1726 for Thomas Pelham-Holles, the first Duke of Newcastle. Vanbrugh's main contribution to the gardens was the design of buildings in the landscape. At Claremont he designed the castellated brick belvedere in 1717, and it is one of the earliest mock mediaeval buildings in England. Vanbrugh was much influenced by landscape painters and his strongly romantic streak made him argue, for example, for the retention of the old Woodstock Manor in his proposals for the landscape at Blenheim. At Claremont, his tower was described by Colin Campbell as "singularly romantick" in his *Vitruvius Britannicus*.

Charles Bridgeman's main contributions to Claremont were the round pond and the grass amphitheatre. The idea of a theatre in a garden was derived from Italian renaissance examples of theatres in gardens designed for the performance of plays and operas. In England, Alexander Pope's garden at Twickenham had its little theatre and Rousham and Stowe both have good examples. In the 18th century, the "prodigious grandeur" of the amphitheatre at Claremont was much admired. During the recent fête champêtre the great grass steps and slopes came into their own as viewing terraces for the theatrical events around the lake.

William Kent followed Bridgeman and he softened the outline of the round pond and built a grotto and an island temple. In 1768 the Claremont Estate was sold to Clive of India when Capability Brown made the park much more informal. During the 19th century Claremont House (which is now a school) had a succession of interesting residents including Princess Charlotte in 1816, Queen Victoria as a holiday visitor, and the exiled King Louis Philippe of France.

The object of the National Trust's careful restoration has been to expose the elements of the 18th century landscape by closely examining the available historical evidence. Some of the later 19th century planting has preserved as part of the garden's total history. The lake demanded considerable restoration work including the strengthening of the banks with timbers from diseased elm trees felled on the site. William Kent's grotto and flint temple have both been extensively rebuilt and the great Turf Amphitheatre has been rescued from late 18th century planting and subsequent growth of shrubs and trees.

While there can be no doubt that the garden came into its own at the 18th century style fêtes (which were excellently planned and organised) Claremont is a garden to see at all seasons. Its size is intriguing. Visitors are seduced by the well-contrived prospects into thinking that the garden is very large and rambling.

In fact, many visitors will agree with Thomas Whateley, who observed in his book *Observations on Modern Gardening* in 1765, that Claremont is "a place wherein to tarry with secure delight, or saunter with perpetual amusement."

It is a great joy to visit Claremont and feel, once again, part of a great English gardening movement. There are all the necessary 20th century comforts there too, including an exhibition about the history and restoration of the garden which is not to be missed.

Claremont Landscape Garden is on the Soth edge of Esher, on East side of A307: no access from A3 Esher by-pass. Open every day April to end October 9 am-7 pm. November to end March 9 am-4 pm.

Guidebooks and tourism exhibition

The exhibition *Guidebooks and Tourism: The British in Italy*, to be seen in the British Library, Great Russell Street, London WC1 between July 25 and October 26, 1980, is a survey of the early guidebooks to Italy, in English and other languages, that were used by British travellers. The exhibition also seeks to suggest in words and pictures the reactions to their experiences (and to their guidebooks) of some of the more interesting or at least typical British visitors to Italy, from the Middle Ages down to the beginnings of the conducted tour.

The guidebooks in the exhibition are accordingly supplemented by engravings, souvenirs, travel documents, maps and itineraries, some of which are borrowed from institutions and private collections.

Wembley Conference Centre

First Nights of the Proms

by DOMINIC GILL

While Radio 3 (true to its promise to substitute as far as possible performances on tape or disc for its cancelled live Prom programmes) was broadcasting Adrian Boult's recording of Elgar's oratorio *The Apostles* on Friday night, the BBC Symphony Orchestra was giving its own "First Night of the Proms" independently at Wembley.

Neither, in the circumstances, was a very inspiriting affair. Nothing on the air can take the place of a real, live Prom direct from the Albert Hall: and the Orchestra's own alternative event under the baton of Colin Davis, brave gesture though it was, and for the most part excellently played, had only the faintest flavour of the real thing. For a start, few open spaces in London come closer than the Wembley Conference Centre to reproducing the acoustics of an anechoic chamber (and especially, as on Friday, without the hall's "acoustic clouds" in position: later concerts in the series will sound marginally sweeter).

Few scores, either, are worse suited to such a desiccated acoustic than Chaikovsky's B flat minor piano concerto and Berlioz's *Symphonie fantastique*. The Berlioz performance seemed to be happening somewhere at the wrong end of an ear-trumpet: a sonority displaced and degutted, without any kind of immediacy, and with a slightly tinny edge. And even the most thunderous blitz-octaves of Cristina Ortiz—who launched herself with admirable fire into the Chaikovsky, to give what would otherwise have been an exceptionally strong and forceful account of the solo part—had the impact and resonance of a spoon smacking plasticine. Not all the jubilance of the 200 prommers who crowded the well of the stage, nor the very evident warmth and goodwill of the audience, some 2,000-strong (the Wembley Centre holds 2,500), could make up for such basic sonic deficiency.

A Financial Times leading article last Thursday summed up the main ingredients of this unfortunate dispute very clearly: the obstinacy (and sometimes the regrettable inflexibility) of the Musicians' Union; the appallingly tactless mismanagement of the affair by the BBC; and at the root of it all, the fundamental question of financing. The damage done to the great fund of goodwill which undoubtedly used to exist between the BBC and musicians everywhere will take a long time to repair. But the two events of Friday evening only served to emphasise how much, after all, the BBC and its musicians need each other: how unthinkable any long-term breach must be: and that a permanent solution of mutual benefit, inevitably discussed at Government level, can and must be worked out soon.

More alternative Proms are planned for Wembley: on July 24, Charles Groves will conduct Chaikovsky's Fifth and songs from Mahler's *Des Knaben Wunderhorn*; on July 25, the BBC Concert Orchestra gives a Viennese Night under Ashley Lawrence with Theresa Cahill; on August 1, Simon Rattle conducts Elgar's first symphony, and on August 11, Bernard Haitink, Mahler's First. The BBC were unable to book Pierre Boulez for their own Proms, but the Orchestra have scooped them: on August 15, Boulez has agreed to conduct a Wembley programme of Debussy, Bartok and Stravinsky.

Guildhall

Israel in Egypt

by MAX LOPPERT

The Monterverdi Choir and Orchestra brought the 1980 City of London Festival to an elating close on Friday, with an account of *Israel in Egypt* grand in span, urgent in progression, hardly interrupted in momentum. Such a description serves to suggest the peculiar success of the occasion; for received opinion of Handel's oratorio discerns a work of uneven quality —"unsatisfactory as a whole and musically very unequal" is Winton Dean's pithy judgment —and memory can supply a substantial number of performances in which received opinion was supported rather than contradicted.

On this occasion the structure of the work emerged as purposefully calculated and dramatically fluent, the inspiration various in kind and high in character. An enthralling first half, almost exclusively choral, keeps the listener intent on the punishment of Egypt; it is balanced by the relaxed, lyrically copious second, in which in an amiable succession of solos, duets and choruses the triumph of Israel is celebrated. John Eliot Gardiner's accomplishment as a Handel interpreter was particularly notable in the first half, the suavity of his conducting style and care over beginnings and ends of phrases being underpinned by an unerring grasp of Handelian design. Each of the famous examples of orchestral word-painting made a great effect (the strings, buzzing like flies and then sinking in alarming changes of harmony to spread "a thick darkness over the land," were controlled with expert point); yet there was no wallowing in the delights of Handel's musical imagery, no exaggeration of his dramatic strokes.

The excellence of the chorus owed much to its inclusion of singers of soloist quality, among whom Mr. Gardiner had liberally shared out the arias and duets (including three true-voiced countertenors for the alto solo music). If the results were mostly neat and professional rather than anything more vivid, the method of allotment at least ensured that not an ill-tuned or unrhythmical phrase was allowed—a feat not always guaranteed by Handel soloists of more marked individuality. From Stephen Varcoe and Brian Gordon there was perhaps a want of sheer heft for the duet "The Lord is a man of war"—but not of precise musicianship. The robust, well-schooled tenor of Maldwyn Davies stood out for dramatic thrust. A too-relaxed tempo for "Thou shalt bring them in" proved mildly troublesome, two unstylish solo cadenzas rather more so (one, in "The enemy said," took the tenor William Kendall to an improbable C above the stave). Otherwise, only praise. The Guildhall acoustics may not suit all kinds of music equally well; for Handel in trumpet-and-drum vein it makes a happy choice of venue.

Wigmore Hall

Winterreise

by DAVID MURRAY

The current Songmakers' Almanac series concentrates upon song cycles, and Friday evening was given over to Schubert's *Winterreise*. It was sung, of course, by just one of the Almanac group—Richard Jackson, whom fate chose to saddle with a bad cold for the occasion; as usual Graham Johnson accompanied. The Jackson cold may have enforced some cautious restraint, but it did not spoil a creditable performance. Well-studied and judicious, with a minimum of visible histrionics, Jackson's account of the cycle betrayed little immediate edge of feeling: but that, I thought, was due less to vocal constraint than to the imperfect focus of work-in-progress.

No complaints about that: obviously the dramatic proportions of *Winterreise* can't be worked out in private, and already Jackson conveys its broad lines with an assurance that goes far beyond 'prentice work. Certain songs—notably "Frühlingstraum" and "Das Wirtshaus"—sat uncomfortably in the sequence, as if he were undecided about the exact points they should make (or feared to let their sentiments show). The opening and closing "Gute Nacht" and "Der Leiermann" were taken a fraction too briskly to suggest the despairing trudge of the one or the numb surrender of the other. Elsewhere there was much subtlety, and an admirable virility of line that disdained easy pathos. The impression of self-effacing attention to the music was heartening: I am sure that Jackson has a distinguished *Winterreise* in him, still a little way off.

Others have remarked on this page that Johnson's sterling work with the Almanac—he is a great inspirer of singers—leaves his actual playing several points behind. That is not always true, but it does seem that his busy musical life makes too little room for practice. On the one hand, there was continuous sense and lively intelligence in his contribution to this *Winterreise*; on the other, the fumbling effort involved in "Erstarrung" and "Die Post" was a heavy distraction—and surely he cannot have meant the pianissimo falling leaves of "Letzte Hoffnung" to snap like firecrackers? Much of the first half was just too loud (many a dramatic *fp* became a simple *f*). And he must expunge the late-Romantic mannerisms of leading a strong crescendo to a sudden wilting *piano*: it contradicts both the letter and the spirit of Schubert's spare, sturdy writing, diluting its tragic power with mere "expression."

Imperial Tobacco continue support for Glyndebourne

Imperial Tobacco are to continue their support of opera at Glyndebourne by sponsoring Rossini's *Il barbiere de Siviglia*, one of the two new productions in the 1981 Festival.

This will be the fifth new production at Glyndebourne with which Imperial Tobacco have been associated. Previous productions were *Fidelio*, 1979, *Die Zauberflöte*, 1978 and 1980, *Don Giovanni*, 1977 and 1978, *Der Rosenkavalier*, 1980.

Arts Council appointment

The Arts Council has appointed a new chairman of its music advisory panel. John Manduell, principal of the Royal Northern College of Music, has succeeded Dr. Basil Deane in this post.

OLYMPICS, FUTURE AND PRESENT—by MICHAEL THOMPSON-NOEL

Not Shame Games for Coe or Ovett

WILL THE Olympics survive? Mexico, in 1968, indicated that they would not. Munich, in 1972, suggested that they could not. And the bungling of Montreal in 1976 very nearly confirmed that they should not.

Yet here they are again—harassed, to be sure, but undeniably under way. For many, the Moscow games were irretrievably damaged long before Saturday's curiously immaculate opening ceremony.

Innocent

They are the Shame Games or the Propaganda Games, anything but the innocent celebration of youth and world fellowship that Baron Pierre de Coubertin had in mind in 1894 when he told an international conference at the Sorbonne that there should be a revival of the ancient Games as a means of combating the feuding and dissension between nation and nation, and the commercial tainting of sport that was apparent even then.

Yet despite the Carter boycott, the Games roll on, and the signs and words from Moscow, to say nothing of the "edited" television images, suggest only one thing: that the extraordinary single-mindedness of the various Olympic committees and officials have triumphed once again over the objections and the doubts of those in the sidelines, be they Prime Ministers or whatever.

Whether the medals won in Moscow will indeed be tarnished, as Mrs. Thatcher has claimed, only time will reveal. But it seems unlikely that in years to come anything will be seen to have diminished the likely highlight of the Games, the confrontation between the two most brilliant middle-distance runners in the history of sport.

That these athletes are British is almost incidental. At 23 Sebastian Coe is "thin but fun," to use his own words, and holds the world's 800 metres record at 1 min 42.4 secs. He was also the world mile record-holder until relieved of the title in Oslo by Steve Ovett on the first day of this month.

At 24, Ovett is taller and stronger and nobody's description of fun. He ran his record mile in 3:48.8, and in the same Oslo stadium last Tuesday equalled Coe's world 1,500 metres record at 3:21.1. To round out the picture Ovett's best time for the 800 metres is 1:44.1, in Prague in 1978.

Thus the stage is set for one of the most compulsive Olympic showdowns since the war. They will meet first in the 800 metres, and then in the 1,500 metres. The first round of the 800 metres is on Thursday, the second on Friday, the semi-finals next Saturday, and the final the following day.

Superior

The first round of the 1,500m will be run on Wednesday, July 30, followed by the second round the next day and the final on August 1.

At present the inside view is that Coe will win the 800m gold, but that Ovett's superior strength will prevail at the longer distance.

Thomas Wessinghage of West Germany, who is not at the Games, favours Ovett for the 1,500m. He finished second to Ovett in Oslo last Tuesday, saying he had never seen anything like it. Ovett threw in his customary wave to the crowd, yards from the tape, and yet equalled Coe's world record.

In the view of John Walker of New Zealand, former mile record-holder and third in Oslo last Tuesday—also not at the Games—Coe will win both titles, the 800m because of his phenomenal natural speed, the 1,500 metres, because he thinks Coe has the ability to run the distance in 3:28.0, a shade over four seconds, or approximately 30 yards, faster than he or his great rival have run it before.

The clever money is keeping quiet, advancing no view, if for no other reason than that both young men have timed years of preparation to the moment they appear in the Moscow finals; also that despite their world record heroics of the past two seasons, the true depth of their potential has not been revealed.

Propaganda games and tarnished medal ware or no, there is nothing ambiguous about the way in which these two young athletes stand ready for greatness.

Racing deal to end

JAMES BUCHANAN, the whisky distillers, to withdraw its sponsorship of two November races at Ascot from next year, after 15 years.

THE BRITISH OPEN—by BEN WRIGHT

Slow advance to victory for Watson

THE MAGNIFICENCE of Tom Watson's golf made victory in the 109th Open Championship at Muirfield an anti-climactic formality as undeniably the best golfer in the world strode, albeit rather slowly, to win by four strokes over Lee Trevino and by six over a third American, Ben Cranshaw.

Carl Mason from Reading salvaged something from the wreck of British hopes by tying for fourth place with the extraordinary Jack Nicklaus, who by finishing once again in the top six extended his record to never having been outside the first half-dozen since his first Open at Troon in 1962.

Watson, winning Britain's premier title for the third time —previously at Carnoustie in 1975 and Turnberry in 1977— had rounds of 68, 70, 64, and 69 for a 13-under-par total of 271, three worse than his winning aggregate of 1977.

Trevino had rounds of 68, 67, 71, and 69 for a nine-under-par total of 275 to his partner Crenshaw's 70, 70, 68, and 69 for a seven-under-par total of 277.

Mason and Nicklaus were three strokes further behind at four under par. One of the strange coincidences of the day was that all the first five competitors had rounds of 69, two under par. Watson won £25,000, Trevino £17,500, Crenshaw £13,500, and Mason and Nicklaus £9,250 each.

Watson's snail-like partner, the slim Scot, Ken Brown, ensured that the last couple on the course took 4½ hours to get round, a shameful pace at which to play the game.

Brown took 76 shots to finish in a tie for sixth place, with three more Americans, Andy Bean, Hubert Green, and Craig Stadler. The defending champion, Seve Ballesteros, finished a distant 19th.

If Watson was to be frightened as he started the day with a four strokes cushion over Trevino and Brown, someone had to make an early move to disturb his calm and elegant progress.

It was Crenshaw who got away to the best start from a position six strokes behind the leader. He got in a 15-foot putt on the first green for a birdie, but poor Trevino, who had dropped strokes to par at each of the last three holes the previous night, made another nervous start, which was eventually to give him too much work to do.

He went through the first green from deep rough to the left of the fairway, chipped poorly to drop a stroke to par at the first, and then took three putts on the fourth green to drop another.

Watson made a brave par at the first from the left-hand rough, and thereafter made very few mistakes. He played only three holes poorly, the third, the tenth, and the 13th, at each of which he dropped a stroke.

He went from rough to rough at the third, could not reach the green at the 475 yds tenth hole with two wooden club shots, and for once played an indifferent chip, was bunkered to the left of the short thirteenth, and missed from seven feet.

In the brisk and cold easterly breeze, the only mild flutter of excitement came about at the difficult 444 yds eighth hole, where Trevino made a birdie from 25 ft and Crenshaw from 20. At this stage Crenshaw had crept to within three strokes of the leader at seven under par to Watson's 10 under after five

The 495 yds, relatively easy par five ninth hole thus became utterly crucial, since both Trevino and Crenshaw could reach the green with an iron.

Trevino did so with a glorious one-iron shot, 10 ft behind the hole, but Crenshaw came over the top of his three-iron shot and hit it to the left and short of the green.

From here he could make no better than a par, since his ball was sitting up so well in the deep rough that he cut clean underneath it with his pitch and left the ball very short of the hole. Trevino likewise could not make his putt for an eagle three, and the one real moment of crisis for Watson had passed.

The quality of the winner's golf was quite superb, in that he missed few fairways, and when he did his iron play was glorious and his putting mostly inspired.

The first Sunday finish of the championship was in a sense decisive, in that total attendance figures were 133,670 against the 1979 total at Royal Lytham of 134,501 the all-time record.

As usual, the British effort fell decisively short of adequacy, as one has come to expect since Tony Jacklin faded into comparative obscurity.

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Fragility in Zimbabwe

NO ONE ever thought the reconstruction process in Zimbabwe was going to be easy. The legacy of bitterness of the years of civil war was too deep, and the aspirations of the emancipated black population too high, for Mr. Robert Mugabe to be able to find any simple route to political stability and economic prosperity.

Nevertheless the success, against all the odds, of the British and Commonwealth-supervised cease-fire and election process did inspire an illogical faith that those problems could be resolved. But that faint hope appears increasingly fragile.

Demonstration

The escalating bickering between the supporters of Mr. Mugabe and Mr. Nkomo in Government, and the growing confusion between rhetoric and reality in relations between Zimbabwe and South Africa, were perhaps predictable. But the decision by Lieutenant-General Peter Walls to quit at head of the country's joint military command is the most dramatic demonstration to date of the intractability of the problems Mr. Mugabe is facing.

The plan to integrate the armed forces of the three major warring factions in Zimbabwe—the white-officered Rhodesian security forces, the semi-regular Zipra guerrillas loyal to Mr. Nkomo, and the irregular, and most numerous, Zanla guerrillas supporting Mr. Mugabe—has always been potentially explosive. General Walls' early retirement can only make it more difficult. His move presents General Sir Erwin Bramall, the British Chief of General Staff, with a serious problem on the eve of his visit this week to review the progress of the British-assisted integration.

There were two main purposes behind Mr. Mugabe's original controversial decision to appoint General Walls. One was to provide a supreme commander who was essentially neutral in the rivalry between the forces of Zanla and Zipra, and therefore to postpone the divisive decision on who should become the first black military commander. The second was to reassure the dejected White community of its safety. His departure suggests the possibility of failure on both counts.

It is a sad illustration of the depth of white bitterness that General Walls' appointment was widely regarded not as a gesture of conciliation, but as a sell-out by the former Rhodesian commander. He does not seem to have recovered from that reaction.

As for his achievement as a neutral arbiter, progress on integration has been pitifully slow; one combined battalion was formed at the end of June and a second is undergoing train under British supervision outside Bulawayo. Under a six-week rotational training programme a new integrated battalion is theoretically to be formed every fortnight, but to judge by the progress to date, that aim seems excessively optimistic.

The major blame for the slow progress must be laid at the door of the political parties. Mr. Mugabe's failure to prevent his senior Ministers from attacking Mr. Nkomo, and the latter's obvious disaffection with the whole fragile alliance, have given their tribally-divided guerrilla supporters no incentive to bury their own differences.

Uncertainty

The longer the uncertainty continues, and more than 30,000 guerrillas languish in separate camps, the greater the danger of a return to bloodshed. Mr. Mugabe has a unenviable task seeking a successor to General Walls. He can pick his own controversial Zanla commander, Rex Nhongo, and alienate Zipra and the white community. He can pick a Zipra man, Dumiso Dabengwa (the head of security, who was the outstanding guerrilla commander during the cease-fire process) and undermine his own position. Or he can look for another neutral figure like General Walls, possibly from outside the country — perhaps from Britain.

Whatever he decides Britain should be cautious in its approach to the whole business. Both for the future of southern Africa, and the protection of British interests and investment, a stable Government under the man shown to be overwhelmingly the popular choice, is the most desirable objective. That may well require further British assistance.

No verdict on comprehensives

THE REPORT by the National Children's Bureau on secondary education has been called a "vindication" of comprehensive schools by several of their committed supporters, including Mr. Neil Kinnock, the Opposition Spokesman on education. The epithet, however, testifies more to the convictions of those who use it, than to their ability or willingness to view objectively the evidence on which the report was based.

It is true that the bureau's research, as part of its long-term study of children born in a particular week of 1958, has refuted the common belief that comprehensive schools retard the educational progress of pupils with unusually high academic ability. The bureau's tests showed that when aged 16, such children achieved similar standards of literacy and numeracy whether they had attended comprehensives, or the grammar schools which with the far less academic secondary modern schools constitute the "selective" sector of State education.

Disappointment

This indication is nevertheless outweighed by two other findings. The tests failed to justify to any marked extent the favourable belief that the comprehensive structure enhances the progress of children with low academic ability. Such children did similarly badly in both sectors, although those at comprehensives tended to be ahead of those at secondary modern schools in mathematics. But the second disappointment is the more significant. It is that children with a middling talent for scholarship—who constitute the majority—did less well in comprehensives than in grammar schools.

The mixture of some favourable with a greater amount of adverse evidence, characterises the bureau's research into other attributes of the 6,000 16-year-olds covered by the survey. Those in comprehensive schools which had established effective sixth-forms showed more keenness than their counterparts in the selective sector as a whole to stay in full-time education beyond the compulsory school age. Even though this tendency is viewed by the educational profession as an unqualified good, however, it is not beyond question. Staying on may not always be the best course for children whose middling academic ability has not been developed sufficiently to achieve examination results which would definitely improve their career prospects.

Moreover, when parents were asked their opinions, only 70 per cent of those with children in comprehensive schools were satisfied, compared with 81 per cent of those with sons or daughters in the selective sector. And while the bureau suggests that comprehensives might do more than secondary moderns to encourage working-class children to aim at a clerical career, the report also states that there was "only limited evidence of increased class mobility and little sign of any higher aspirations engendered by theoretically less (socially) divisive comprehensive schooling."

The report is therefore not a vindication of anything. The best term for it is probably "inconclusive" because the questions it answers are far outnumbered by those it begs. This is so particularly since the survey was made in 1974 when fewer than half of the country's secondary-school pupils were in comprehensives, and much has surely changed in the interval. Indeed, the most favourable finding — that the most academically able did equally well in comprehensives — was directly contradicted by an inquiry made by the State Inspectorate in 1975. But even the Inspectorate's later finding could no longer be safely considered valid today, when the proportion of secondary pupils in comprehensives has risen to five-sixths.

Discipline

On the evidence, it could equally be argued that whether secondary schooling is comprehensive or selective is less important to the child than factors which are not dependent on the structure of education. For example, as well as discovering that mediocre scholars did less well in comprehensives, the report found that these schools had a higher rate of truancy. Both could be attributed to a weakness of discipline, which is certainly not necessarily a function of type of school. It is a function of the determination of teachers to ensure that a child does well, and of the support the teachers are given by parents and by the values of society at large.

Hopeful signs on Britain's inflation front

BY PETER RIDDELL, Economics Correspondent

INFLATION is largely a matter of attitudes and expectations. Recently these have changed dramatically. A Gallup Poll last Thursday showed that the proportion of people rating inflation as the country's most urgent problem had dropped since May from 41 to 27 per cent—in part because of a marked increase in concern about unemployment.

The evidence to explain this change of view can be seen all around. In one North London High Street, for example, almost every shop front was last week offering special offers and price reductions. The only exceptions were banks, building societies and an undertaker.

Industry is having to limit its price increases. A recent Confederation of British Industry survey showed that fewer companies were planning to raise their prices during the coming four months than at any time for 7½ years. The reports of price cuts or of very small price rises range from textiles and chemicals to household goods. For example, the price of polypylene—used to make plastics—has fallen by 10 to 17 per cent in the past three months, while prices charged for a range of metal manufacturing products were on average lower in June than in February.

This slowdown is now beginning to show through in the official statistics. After rising by nearly 6 per cent in the first three months of this year, prices charged for manufactured products increased by less than 3½ per cent between March and June. Similarly, the Retail Prices Index has increased by just under 1 per cent in each of the last two months, much less than the average monthly rise of more than 1½ per cent earlier this year. The current High Street price cutting has been reflected in a marginal fall in the price of durable household goods between May and June, and petrol prices have dropped since then. The overall slowdown would have been more marked but for a continuing sharp rise in prices charged by nationalised industries, such as gas and electricity.

The peak of the 12-month rate of increase in retail prices—the usual headline yardstick of inflation—was slightly less than been feared. The mid-May rate was 21.9 per cent, compared with earlier projections of a possible peak of more than 23 per cent. The latest figures showed that deceleration has begun with a 12-month rate of 21 per cent in mid-June. This should fall by at least a further 3 percentage points when the next index is announced. This is because the price rises caused by the increase in Value Added Tax last summer will drop out of the comparison. And the 12-month rate should be down to the forecast level of 16½ per cent by the end of this year, and possibly even less if the current price cutting continues.

Perhaps most significant of all are the signs of possible changes in the labour market. The annual rate of growth of average earnings has stopped accelerating and is now about 21 per cent after rising from less than 15 per cent over the year before. Admittedly this is so far mainly the result of less overtime and more short-time working. But Sir Geoffrey Howe, the Chancellor of the Exchequer, felt able to claim last Tuesday that there was "increasing evidence of a new mood of realism on pay spreading through British industry."

The facts to date are far from conclusive. The CBI's Midlands region has reported that pay rises had recently averaged about 8 per cent. But this may not be typical of the country as a whole. The Midlands includes a heavy concentration of small and medium-sized manufacturing companies which are particularly exposed to the special problems of the motor sector and to the sharp downturn in

Exceptions were banks, building societies and an undertaker

engineering. There is less evidence so far of a significant slowdown in pay rises in either the public sector or private sector services. Nevertheless the trend may be about to change.

These factors have together produced a marked change in attitudes since the spring among politicians and economists. If there is not exactly euphoria in Whitehall—as there hardly could be in view of the unemployment outlook—there is at least an air of optimism, notably among Treasury Ministers. There is a feeling, admittedly a controversial one, that at last the Government's policies are beginning to achieve some success in the key policy area of cutting the inflation rate. This new mood was symbolised by the apparently rather upbeat presentation on the economy given to the Cabinet a fortnight ago by Professor Terry Burns, the Treasury's Chief Economic Adviser.

Expectations about the prospects after this year have also changed in the City. Analysts are now busily revising downwards their projections for wage increases in the coming round and for price rises in 1981, often by a couple of percentage points. The general view of most stockbroking economists is now that average earnings will rise by between 13 and 15 per cent in the coming year and that the 12-month rate of retail price inflation will be down to between 10 and 13 per cent by the end of 1981. These forecasts are not infallible and they were generally too optimistic a year ago. But what matters is the current bullishness—the belief that inflationary psychology has changed.

The shift in inflationary expectations can be directly related to the dramatic start of the recession in April and May. Both domestic and foreign demand for a wide range of goods has fallen sharply. This has forced industry to limit price rises in order to remain competitive. Indeed there have been price cuts in cases where manufacturers and retailers have attempted to reduce excessive stocks of goods which are expensive to finance at current interest rates. This adjustment could last for about a year though in retailing the rundown could be shorter. Thus the next few months could be one of the best times ever to buy durable household goods and cars—while stocks last. When industry and retailing are going through a difficult period it is good news for the consumer.

The deepening recession has also been the main influence on the apparent change in the climate of wage bargaining. This can be described as "old-fashioned deflation." But whatever the label, there is little doubt from the comments of employers and shop-stewards alike that continuing large-scale redundancies and rising unemployment are having an impact on pay claims. This applies particularly in regions such as the Midlands which are used to relatively full employment.

All this is some way from the Government's aspirations in its first Budget in June, 1979. It was then hoped that a reliance on targets limiting the growth of the money supply would influence behaviour and reduce the underlying rate of inflation. In the event, the rate of growth of both wages and prices accelerated rather than slackened. This outcome can be blamed partly on an underestimation of the problems inherited from Labour (especially the rise in wages), partly on the Government's own mistakes (notably the increase in VAT), and partly on the external shock of the further rise in oil prices. Many economists would argue that the Government wasted its first six months and "did not get its act together" until last November. Monetary policy was then at last tightened when Minimum Lending Rate was raised to 17 per cent.

The acceleration in inflation over the last year does not mean that "monetarism" has necessarily failed. But it does suggest that the links between the announcement of monetary targets and inflation are more complicated and involve longer time lags than either the more naive supporters or the more vociferous critics of the Government's approach have argued.

The Chancellor and other Ministers have frequently pointed out that the process of reducing inflation is bound to involve some transitional loss of output. The size and duration of these losses will depend on how quickly behaviour, especially that of pay negotiations, adjusts to the monetary guidelines.

The problem was summed up by the Bank of England in its June quarterly bulletin. "Any restraint of wages in face of prices increase has clearly been less (in the UK) than in many other countries—an indication that inflationary rigidities have got more deeply entrenched in this country than elsewhere, and that the policy required to break inflationary expectations may have to be more severe."

In short, since some people have not adjusted their expectations and pay claims in line with monetary targets the medicine will have to be more severe as they price themselves out of their jobs.

The monetary squeeze may only have started to bite last winter but there is some puzzle about why the strong pound—a feature since 1977-78—did not have more impact last year. After all, the average value of sterling against other currencies rose by 9½ per cent during 1979 alone. The theory is that this should have helped to limit price increases both directly by reducing the sterling cost of imported goods and indirectly by squeezing profit margins and limiting pay rises.

But import prices rose by 20 per cent between the first quarters of 1979 and 1980 and only part of this increase can be explained by the rise in oil prices. The answer appears to be that overseas suppliers took advantage of the buoyant demand conditions in the UK and, where possible, increased their own prices and profit margins; this has contributed, for example, to some of the large profit increases recently reported by Japanese companies.

The further rise in the pound this year and the recent fall in demand have, however, affected

The rate of growth of food prices has been relatively modest

import prices in recent months. The average price of imported manufactured goods dropped by 3½ per cent between the first and second quarters of this year. This in turn has been having an increasing effect on prices charged by domestic suppliers.

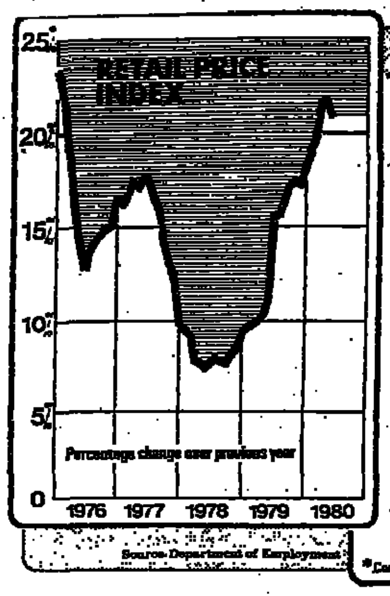
Even before the latest squeeze the threat from imports was probably the main reason why the retail prices of durable household goods and clothing and footwear have increased much more slowly than prices generally. Overall, the strength of the pound in the past two years has probably meant that the 12-month inflation rate is about 3 to 5 percentage points less than it would otherwise be, according to a rough-and-ready estimate given to a Commons committee last week by Mr. Frank Cassell, a senior Treasury economist.

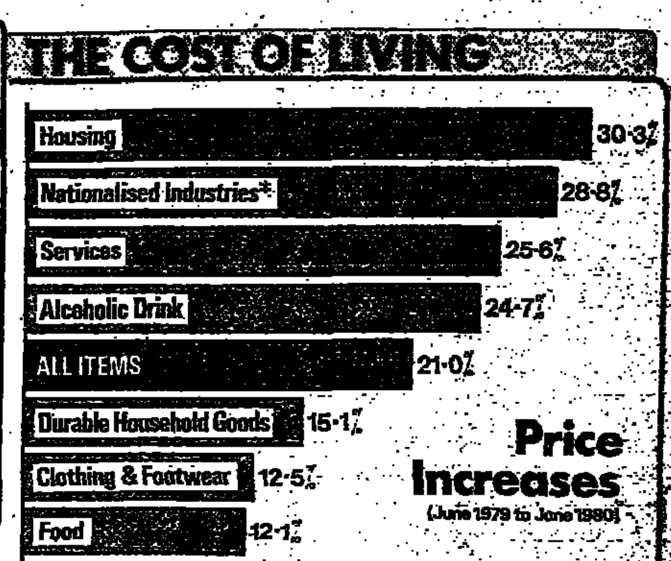
The combination of a strong pound, the monetary squeeze and the domestic recession are now clearly acting as a check on price rises. In addition, the rate of growth of good prices has been relatively modest—at just over 12 per cent annually—while there has been a marked slowdown in the rate of increase of world commodity prices. Moreover, some of the price increases over the past year can be regarded as exceptional: apart from the rise in VAT, some, though not all, of the 28.8 per cent rise in nationalised industry prices in the past year represents a catching-up after the price restraint before the last election. Energy prices, however, are still likely to rise fairly fast over the next few years.

Senior Ministers and pundits are probably right to predict a substantial fall in the inflation rate during the next year or so, especially if the mortgage rate comes down next year. But there are still several major uncertainties. In the short-term, market forces may curb the level of pay settlements in large parts of the private sector but the same will not be true in most of the public sector. There, the Government's desire to limit pay rises will be tested.

In the longer-term, the main question is how far some of the pressures reducing the inflation rate may be temporary and cyclical. This does not mean that the economy cannot recover without pushing up the inflation rate; indeed, without a reduction in the rate of inflation a sustainable revival in output is unlikely. But it is possible that world commodity prices and sterling may not be favourable factors after mid-1981, while industrialists will be looking for every opportunity to boost their profit margins if demand expands.

Monetarists believe that as long as the Government sticks to its medium-term strategy it should be possible to cut the inflation rate to single figures and keep it there. Other economists and politicians are sceptical about whether a rate of under 10 per cent will be achievable without a further major change in inflationary psychology and without an unacceptably large loss of output and jobs. For all the current confidence in Whitehall the worry remains that the current squeeze may only succeed in reducing the inflation rate, to where it was, temporarily, in 1978-79.





INTERNATIONAL COMPARISONS OF AVERAGE ANNUAL RISES IN CONSUMER PRICES

	1977	1978	1979	12 months to May, 1980
U.S.	6.5	7.7	11.3	14.4
Japan	8.1	3.8	3.6	8.2
Germany	3.7	2.7	4.1	6.0
France	9.4	9.1	10.8	13.7
UK	15.9	8.3	13.4	21.9
Italy	17.0	12.1	14.8	20.8
Canada	8.0	9.0	9.1	9.4
Total (OECD)	8.7	7.7	9.9	13.8

Source: Organisation for Economic Co-operation and Development.

MEN AND MATTERS

Play it again

"As with all projects here," sighs Treasury assistant secretary Andrew Edwards, "it all depends on the finance." In this instance, however, his concern is associated not with his daily round in European monetary affairs, but with a plan to stage a concert.

Conductor and dogsbody to the Treasury Singers since 1968, Edwards is currently fretting about the chances of mounting a Monteverdi extravaganza and specifically of unearthing in Whitehall or anywhere else the specialist musicians needed to give his venture the essential note of authenticity. "To sound really exciting we shall need sackbuts and cornetti. But there is hardly such a thing as an amateur sackbut player," he complains.

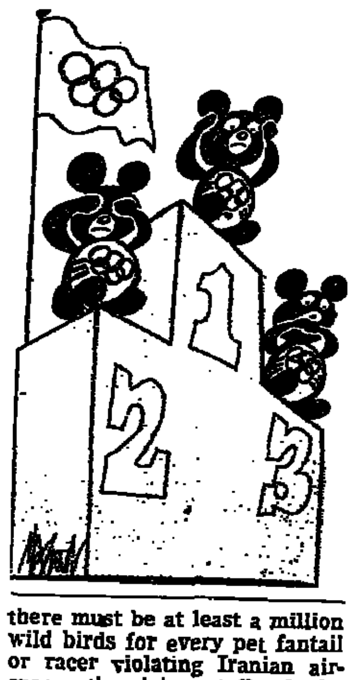
Still, he is well accustomed to getting the best out of scratch pro-am orchestras—the rehearse each piece only once with his Whitehall songsters—as was evidenced at their latest performance: the Beethoven Mass in C. A stirring, if occasionally hiccuppy affair, the concert was enlivened for me, I must admit, by the programme notes.

"The word credo," writes Edwards, in terms apparently culled from one of his Treasury memos, "is repeated three times, more insistently each time, in a great crescendo of fervour and conviction. . . ." But the bit I cannot wait to hear again comes in the Agnus Dei, where, he says, "the chorus enters with a great cry of penitence."

Easy as pie

Iran's trigger-happy law enforcement authorities, having cut a swath through that unhappy nation's ranks of drug traffickers, counter-revolutionaries, pimps and other malfeasants, have now directed their awesome powers on the innocuous pastime of the pigeon fancier.

Apparently unaware that



there must be at least a million wild birds for every pet fantail or racer violating Iranian airspace, the joint staff of the armed forces has broadcast a warning on Tehran Radio of imminent punishment for people keeping and flying domestic pigeons. The "crime," the military says, lies in the threat from birds to aircraft.

Told to "co-operate," but not told how, I suppose fanciers are expected to respond with offerings of pigeon pie to help ease the capital's chronic meat shortage.

In the cards

How thoughtful, I thought, of Northwest Orient Airlines, to supply its passengers with a handy and entertaining phrasebook to help them on their way through their daily business in their Far Eastern destinations.

It has printed decks of playing cards to wile away the waiting with patience or, if travellers choose, in learning a little of the Japanese, Korean and Chinese languages.

The ace, for example, tells one how to say "thank you." The queen will hail you a taxi, while a quick shuffle and the appearance of the jack will demand you see the manager.

The one that worries me, however, is the joker, which tells you how to ask the way to the nearest police station. Or maybe Northwest Orient are trying to tell us something about police services in their neck of the woods.

Do T day off

With a good half dozen Bills pushed through Parliament in their first year and many thousands of miles of travel logged between them, the Department of Trade's five ministers will today enjoy a cosy reunion.

So sprawling is the ministry and so diverse are the preoccupations of Sally Oppenheim, Cecil Parkinson, Norman Tebbit and Reginald Eyre, that Trade Secretary John Nott felt it high time they sat down, together for once, away from the clamour of Whitehall, for a day of reflection and planning.

Should the ship of state run aground in their absence, however, they can be quickly summoned back from their summitry. The meeting will be held in the parlour of a former vicarage—home of Parkinson—in Potters Bar.

Bombing for gold

The ancients, who spent much time pondering such things, believed sport was the best way of keeping mind and body in harmony. Joe Stalin had a different view. To his mind the sole purpose of athletic endeavour was to ensure that new Soviet man could work harder and be a better soldier. This is the principle, Olympics fans please note, which has governed Soviet attitudes to sport ever since. It led to the Gotov k trudu i oborone (Ready for Defence and Labour) movement which lays down the Stalin standard for sporting achievement.

High on the official list of GTO activities, which I have before me, is the thrilling sport of burling the hand grenade. Young ladies must lob the said 500-gram bomb 25 metres to gain a gold, while aspiring males must cover 40 metres with the 700-gram model.

Further down the list of body-building exercises comes shooting a small-bore rifle with an option for the less-refined of popping off with "a heavy weapon."

But the official GTO stamp of approval for your average running, jumping, bomb-chucking, bazooka - blasting Soviet citizen remains tantalisingly out of reach until he or she has withstood the ultimate test—wearing a gas mask for a full hour without gasping for fresh air.

Banking error?

Perception, you will appreciate, is largely a function of perspective. So I suspect the chairman of Crocker National Corporation must have tied himself in knots to have gained his cock-eyed view of the attentions and intentions of the Midland, which plans to buy 57 per cent of his bank.

The arrangement, Thomas Wilcox told the Wall Street Journal, "isn't a takeover. The fact that they will have a majority of stock is almost an accident of accounting."

Defensive stroke

"How curious," remarked the office manager to one of his more predictable absentees, "that your mother should fall ill every time there is an important match at Lords."

"It certainly is, sir," came the reply. "Do you think she's shamming?"

Misfits

Graffito from Islington: "Two in one people are schizophrenic."

Observer

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FINANCIAL TIMES SURVEY
Monday July 21 1980

JAPAN
THE ENERGY CHALLENGE

As one of the biggest consumers of imported energy among the world's leading industrial nations, Japan has been hit correspondingly hard by the second oil crisis. The country's success in coping with the first crisis is a hopeful sign, but its leaders are well aware that the task this time is even harder.

Main obstacle to growth

By Charles Smith
Far East Editor

ENERGY SHORTAGES represent the most serious potential obstacle to Japan's hopes of maintaining rapid growth during the coming decade. Paradoxically, they could also provide the most powerful stimulus Japan has yet received to overtake the West in the development of new technologies and to intervene directly in international affairs outside its own region of North-East Asia.

Whether the overall impact will be positive or negative remains to be seen, but it appears certain that Japan will be changed by the coming energy "squeeze" almost as much as it was changed by the experience of reconstruction after World War II.

The reason why Japan cannot escape being profoundly affected by developments in the world energy situation over the next decade is that it is overwhelmingly dependent on imported energy. Japan ranks second to the U.S. in the league table of oil-importing nations. But imported oil contributes far more to its total energy consumption than is the case with the U.S. or any other major industrial country.

In 1978 no less than 90 per cent of Japan's primary energy supply was imported, with the bulk of the total consisting of Middle East oil. The energy dependence of Japan appears greater still when one notes that 55 per cent of the total came from the Gulf area (including Saudi Arabia and Iran).

Japan's energy vulnerability led to something like panic when the first oil crisis struck in 1973. In the years that followed the economy made an unexpectedly strong recovery from the 1973 quadrupling of oil prices and, by 1978, few Japanese economists any longer believed that energy shortages represented the main potential constraint on GNP growth. This complacence, however, gave way to renewed concern in the spring of 1979 when the Iranian revolution, followed by production cutbacks in Saudi Arabia, set off another round of price increases and supply shortages.

Japan was eventually able to import its full oil requirements for 1979 but at a cost which was roughly three times that of the year before (in terms of yen). It was also obliged, for the first time since 1973, to take a long, hard look at the potential effect of oil and other energy shortages on its long term economic growth prospects.

The result of this reassessment of future prospects was the announcement (in the Government long-term economic development plan published in August, 1979) that Japan could expect to achieve economic growth of slightly more than 5.5 per cent in the first half of the 1980s, and 5.0 per cent in the latter half, if it increased its oil imports by 17 per cent up to between 1979 and 1985 and simultaneously made progress with the conservation of energy consumption by industry and the development of alternative energy sources.

Growth rate

The conclusion sounded reassuring enough given that Japan's growth rate during the six years since the 1973 oil crisis has seldom risen much above the 6 per cent level and sometimes well below 5 per cent. The only trouble is that few energy specialists, either inside or outside Japan, appear to believe that the premises on which the Government plan is based are reliable.

Japan's 1985 oil import target of 6.3m barrels per day, although formally sanctioned at the Tokyo summit of advanced industrial nations (when all the participants set themselves oil import targets for the mid-80s) is now widely regarded as being over-optimistic. "Alternative energy" estimates (for the end of the 1980s) also seem to reflect a good deal of wishful thinking by government officials and are being scaled drastically by private forecasters.

Finally, there are doubts about Japan's ability to get more GNP growth than it is already doing out of a given quantity of energy, given—ironically—that it is already performing impressively in this respect. For the past few years the Japanese GNP has averaged a 0.6 per cent increase in energy consumption for every 1 per cent growth in GNP. This is a better figure than has been achieved by any other major industrial nation.

The conclusion which emerges from these rather depressing facts would seem to be that Japan must either face a considerable cut in growth rates over the 1980s (perhaps to 4 per cent per year or less), or must take urgent action to improve its energy situation by developing alternative energies at a faster rate. In practice it may have to do both these things.

Japan's growth targets probably will be scaled down, though at the cost of painful adjustments in various parts of the economy (including employment). At the same time much greater efforts will be required, and will probably be made, to convince the Japanese public that alternative energy sources such as coal and nuclear power are necessary and should be tolerated despite some obvious snags and disadvantages.

Adjusting the balance between the supply of alternative energies and the rate of domestic economic growth will not be the only task confronting Japan in the 1980s. There are also external challenges to be faced as a result of the energy crisis. These will include finding the means to pay for costly oil imports (which will remain the main source of energy no matter how fast new sources of energy can be developed) and ensuring, or attempting to ensure, against political disruptions to the supply of oil.

Japan's oil bill in its 1980 fiscal year (ending March 31, 1981) is expected to amount to nearly \$60bn, or roughly half of its total imports. This will be covered by maximising exports of manufactured goods (to the developing world and to other developed countries) and by running a substantial deficit on the current account of the balance of payments which will in turn have to be offset by official and unofficial borrowing of various kinds. The current account gap could diminish in 1981 and 1982 if oil prices remain stable or rise only modestly. But almost all Japanese analysts expect further steep price increases by the middle of the 1980s and a corresponding renewal of pressures on Japan's overseas payments.

Opinion

The nation will seek to balance these by obtaining its share of recycled OPEC petrodollars (in other words the excess dollars which oil-exporting countries will earn by jacking up their prices to oil importers like Japan). Recycling alone, however, will not be enough in the opinion of most Japanese observers. It will also be necessary to keep exports expanding rapidly—and to ensure that the products exported are goods which earn a maximum amount of foreign currency with a minimum input of imported energy.

Japan's need to pay its way in a world of scarce and costly oil constitutes the main reason why the country will be placing more emphasis than ever during the next five to ten years on upgrading its industries and obtaining a global "technological supremacy" at least in some chosen areas. By producing goods which are not yet being manufactured in the West (such as video tape recorders) the Japanese hope to avoid trade frictions with the U.S. and Europe and to become accepted as useful, instead of disruptive, members of the world trading community. What they do not seem to envisage is a world in which Japanese industry and technology would be only on a par with western levels, in the sense that it turned out more or less the same products with only minor differences of style or specialisation.

Japan's other main preoccupation in the era of energy shortages will be to find ways of creating a political situation favourable to the smooth flow of energy supplies. Japan is nowhere near attaining the Great Power status which would permit it to intervene by force or threat of force in oil-producing areas such as the Middle East. But it will try hard to use its economic strength (ie, the ability to offer technology and industrial hardware) to make friends and influence people in the Arab world. It may also, increasingly, be inclined to try its hand at Middle Eastern diplomacy.

Influence

Japan made a first tentative move towards adjusting its stance on the Palestine issue during the 1973 oil crisis and in so doing broke with the long-established principle of automatically endorsing the American viewpoint on all major international issues. In future the Japanese may go beyond this and atempt to take a lead in framing Western policy towards the Middle East, possibly even seeking to influence the American position.

It scarcely needs to be stressed that Japan will be playing for high stakes, both economically and politically, as it confronts the seemingly inevitable energy squeeze of the 1980s. If the gamble pays off and the crisis is surmounted the Japanese economy could look stronger at the end of the decade than it does today and Japan could have emerged as a much more self-confident and active member of the international community. Failure to adjust to the circumstances of scarce and costly oil might, on the other hand, mean a low growth economy with a chronic payments problems and perhaps even some internal political instability.

Japan is too important in the world today for its allies and trading partners not to wish it success in its difficult task of adjustment. But those same friends and allies may have to resign themselves to the fact that a Japan which has successfully surmounted the energy challenge will be a still more serious competitor than one which is only starting to tackle the problem.

CONTENTS

Management skills will be put to even greater test

THE ECONOMY

RICHARD HANSON

JAPAN'S BALANCE OF PAYMENTS

($m)

	Exports	Imports	Trade balance	Services	Transfers	Current account	Long-term capital	Basic balance
1975	56,004	50.161	5,843	(5,364)	(345)	134	(260)	(126)
1976	69.394	58,246	11,148	(6,096)	(370)	4,682	(1,606)	3,076
1977	83,363	63,028	20,335	(5,922)	(417)	13,996	(2,441)	11,555
1978	96,978	76,447	20,531	(7,772)	(907)	11,852	(16,229)	(4,447)
1979	105,083	107,539	(2,456)	(10,205)	(1,270)	(13,931)	(8,188)	(22,119)

Notes: 1 Minus figures are in parentheses; 2 The years are Japanese fiscal years running from April 1 to March 31 e.g. 1979 = April 1, 1979, to March 31, 1980.

THE JAPANESE economy deserves the "best effort" award for achieving comparatively high rates of growth with a niggardly increase in oil consumption since the 1973 oil crisis. Unfortunately, it appears unlikely that even highly efficient industrial Japan can improve much more on the amount of real economic growth it squeezes out of the volume of energy it consumes. There is also a serious doubt as to how much energy will, in fact, be available by the end of this decade to support further growth.

These are the new economic facts of life Japan faces in the 1980s. In essence they mean that despite Herculean efforts to restructure and fine-tune the economy after the first oil crisis, the task of making it "energy crisis proof" is still decades from completion. This poses the immediate, and crucial, question of just how much growth the country can afford in the meantime.

At is the case with all questions posed by the energy crises, the answer depends on whether you are talking to an optimist or a pessimist. Roughly, the two groups break down between those who have a definite interest in seeing to it that all is well with the economy (the Government, primarily) and those whose job it is to point out what is going wrong (the private sector, although not all private forecasts are negative). The optimists say that a healthy rate of growth is possible (5-6 per cent) over the next 10 years, while the lower estimates are that Japan will be lucky to be able to afford over 4 per cent.

Those who support the higher rates say that anything less could lead to serious social problems, such as unemployment. On the other hand, advocates of a lowering of the sights say this will help achieve stability and keep to a minimum inflationary strains on world oil supplies. They also argue that supply constraints will automatically hold the economy back — so that, in the end, there may not be much choice.

Committed

In what now seems like the distant past (i.e., before people worried about oil), Japan was committed to flat-out growth to "catch up" with the economic standards of the industrial West. The most important problem faced by Japanese economic managers in the 1960s in achieving double figure growth rates was how to do it despite the severe constraints presented by the country's precarious international payment's balance. Oil was cheap and readily available. If the current account fell into deficit it meant that Japan was consuming more than it could afford to buy from the outside world; the economy, in other words, was over-heated and needed to be slowed down.

The classic deflationary tools were then applied; these consisted of raising interest rates and directly limiting the amount of funds banks could lend. From the mid-1960s onwards this formula worked almost too well, creating a robust economy that tended to be chronically in surplus. By 1970 the surpluses began to annoy Japan's trading partners, forcing Japan to start liberalising its rigid laws on capital flows and to accept a sharp revaluation of the yen. When the 1973 oil crisis struck, the authorities applied the same old brakes and for good measure clamped exchange controls back on the ecenomy.

The Government has been accused of over-reacting initially to the 1973 quadrupling of prices (the discount rate went up a full two points to 9 per cent in one step in December, 1973) and causing a recesssion deeper and longer than it need have been.

GNP growth plunged from 10 per cent in the 1973 calendar year to minus 0.5 per cent the following, and the economy took two full years to recover its vigour. Inflation went from 16 per cent before the oil crisis (fuelled by a rash of speculative land and commodity price increases) to a peak of 22 per cent in 1974 before cooling gradually with the recession.

The authorities have since then become much more adept at handling the shock of an oil crisis, as verified by the reactions so far to the second crisis one which was sparked late in 1978 by revolution in Iran. The most practical lesson learned from the 1973 shock was not to panic. The Government would not like to see a repeat of the fear which spread to consumers and businessmen in 1974. The years between the first and second crises have also been well utilised by Japanese industry to become more energy efficient.

Industry in Japan consumes the lion's share of energy (unlike the U.S. where private consumption, for cars in particuar, uses up large amounts of oil), and it does not need very much encouragement to become more efficient in using it. High rates of energy usage simply cut into profit and make manufactured products much less competitive.

The most spectacular savings have been made by some of the largest users. Steel, cement, aluminum and other big users have cut back successfully mostly through "positive" investment in new, more energy efficient, plant and equipment.

The net result is that Japan went from requiring a 1.34 per cent increase in oil supplies for every 1 per cent of real GNP growth from 1970 to 1973 to an "elasticity" ratio of only 0.55 per 1 per cent GNP growth from 1975-1977. The U.S. became less efficient during the same years going from a ratio of 1.18 to 1.23. West Germany reduced its ratio to 0.86 rrom 1.27 before the oil crisis.

If Japan is to continue exporting successfully it will have to shift its industrial structure even further away from products that require large amounts of energy to produce (just as the economy had to become less labour intensive when wages began to rise). This will mean an increased emphasis on new industries, sophisticated machinery, and even greater efficiency in the old industries.

However, most economists believe that further savings by industry will not translate automatically into even better oil energy "elasticity" ratios. For the 1980s the oil consumption increase rate per 1 per cent of real GNP growth is expected to hover at 0.6-0.7, which indicates a slight deterioration from the peak.

This is in part traceable to the trend for inefficient private consumption to eat up greater amounts of energy (more cars, heaters, air conditioners, refridgerators, etc.). The non-industry sector eventually could account for about half of energy demand compared with 40 per cent today.

Crucially

The rate of economic growth that Japan can "afford" therefore depends crucially on how much oil and other forms of energy will be available over the next decade, here Japan's target figures and "realistic" estimates begin to show wide gaps.

The Economic Planning Agency (EPA) a year ago set as long-range growth targets of 5.7 per cent per annum for the first five years and 5 per cent for the latter half of the 1980s. This assumed the following major factors: 1. That Japan will become about 15 per cent more efficient in conserving energy by 1990? 2. That oil imports will rise 17 per cent from last year's 5.4m B/D to 6.3m B/D; and 3. That progress will be made on bringing alternative energy sources like nuclear power, steam coal and LNG into substantially greater use.

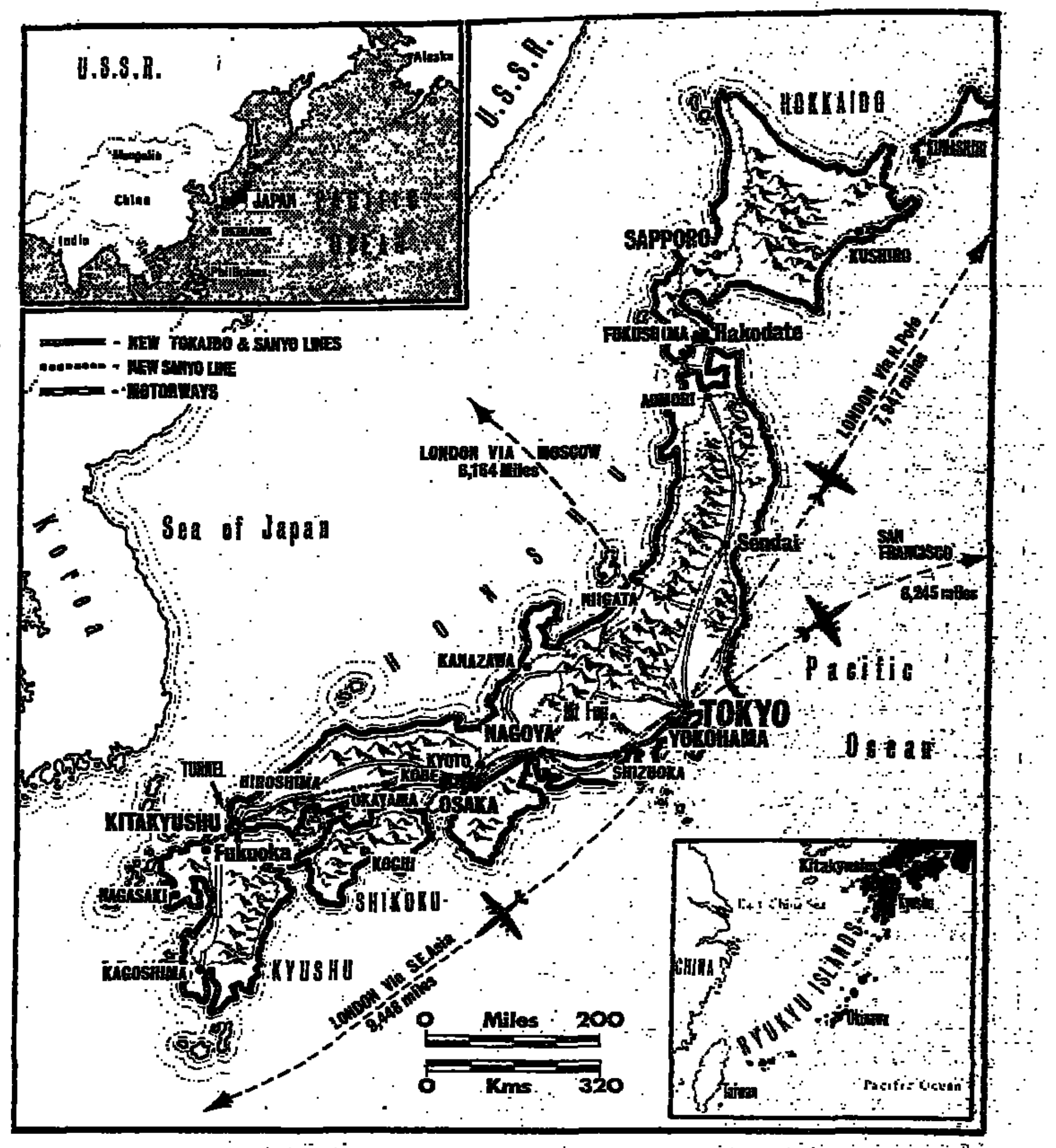
The latter two factors have become extremely problematical, particularly expectations on nuclear power. Some hold that it will be difficult for Japan even to maintain its present level of oil imports, but a more reasonable view is that it will be only able to increase imports by about 10 per cent (rather than the targeted 17 per cent). The private Institute of Energy Economics sees the country falling 12-13 per cent below the 1990 energy supply target. and predicts that growth rates closer to 4 per cent are all that can be expected in the GNP.

What can be said about the Japanese economy from now on with some certainty is that it is finally completing the transition to low growth from the high-growth '60s. The successful recovery from the first oil crisis is still being reflected in the present buoyancy of the economy.

Growth last fiscal year (to March) topped the 6 per cent level in real terms, and is not expected to slow until later this year. The Government estimates something less than 5 per cent for the full fiscal year, on the basis of strong exports and spending by corporations for new plant and equipment.

A price has had to be paid for recovery, however. The national government's finances are in the red, and new taxes will be needed before fiscal stability can be restored. In the interest of keeping down inflation (and keeping industry competitive), Japanese labour has agreed to suffer what will surely be a real decline in income in 1980. More importantly, there is a growing problem of income distribution now that growth has slowed and the population is ageing at a very rapid rate.

One widely held view among Japan's business elite is that it was a good thing the 1973 oil crisis occurred when it did. Otherwise, Japan might not have had sufficient time to prepare for what clearly are the long-term realities of the permanent energy crisis of the 1980s.



BASIC STATISTICS

Area:	377,535 sq km
Population	115.9m
GNP (1979)	Y221.723bn
Per capita	Y1.913m
TRADE (1979)	
Imports	$99.2bn
Exports	$101.2bn
Imports from UK	£606m
Exports to UK	£1,490m
Currency: Yen	Y518.5=£

Currency drawn willy-nilly into greater world role

THE YEN

RICHARD HANSON

ONE OF the "spin-offs" of the second oil crisis is that Japanese currency has been accumulating in the hands of foreigners at a faster pace over the past few months than at any time in the past. This de facto internationalisation of the yen is the result of measures the Government took to defend Japan's exchange rate from further deterioration in the wake of huge oil-induced international payments deficits.

The first oil crisis had led to the abrupt shelving of plans to allow greater international use of the yen. These plans were the brainchild of a small group of Finance Ministry "liberals" some of whom are are no doubt drawing an ironic satisfaction from the fact that their ideas are at long last being put into practice.

"Orthodox" thinking in the Finance Ministry and the Bank of Japan has until now tended to stress the dangers rather than the advantages of too great in international use of the yen. Japan began its post-war economic recovery with a tightly regulated financial system featuring, among other things, officially regulated interest rates. The free flow of funds in and out of the country would have made it hard to sustain such a system and Japan accordingly adopted a foreign exchange control law modelled closely on that of the UK.

Prohibited

The law was based on the principle that all foreign exchange transactions were prohibited unless specifically authorised by the Finance Ministry and the Bank of Japan. In practice this meant that the scope for non-residents to acquire yen assets, or to borrow yen, was almost non-existent from the early 1950s until near the end of the 1960s. A parallel consequence of the system was that Japan's external trade was conducted, and financed, in foreign currencies with the bulk of short-term import finance being arranged through the New York head offices of major American banks.

The "watertight" foreign exchange control system first began to spring leaks in the last few years of the decade of the sixties when foreign investors demanded—and had to be given—increasing freedom to acquire yen securities. From 1970 until the onset of the first oil crisis in 1973 Japan's rapidly strengthening foreign exchange position prompted further tinkering with the system.

International organisations and foreign governments were granted permission to issue yen-dominated bonds in the Tokyo capital market from 1970 onwards (the so-called samurai bonds). At the same time there were discussions on instituting a "yen shift" which would have involved transferring the bulk of short-term import financing from dollars to yen. (This experiment was abandoned largely because the interest rate gap between Japan and the U.S. would have made the transfer prohibitively expensive.)

The 1973 oil crisis, with its overnight effect on Japan's international payments position, derailed these plans in a hurry. Yen lending to foreigners was halted abruptly (although foreigners continued to be encouraged to buy Japanese stocks as a means of "defending" the yen). The samurai bond market remained in limbo until its cautious reopening in 1975.

In 1976 and 1977, when Japan began to acquire, first an ample, and before long an embarrassing external payments surplus there was a progressive loosening of government controls on all forms of yen lending (both samurai bonds and syndicated loans). The amount of "Euro-yen" or external yen in circulation outside Japan accordingly rose from an estimated $2.7bn (equivalent) at the end of 1977 to $6.2bn a year later. The advance of the yen as an international currency coincided with the rapid strengthening of the yen-dollar exchange rate. This hit a peak in October 1978 when the yen briefly touched the level of 175 to the dollar.

By the end of 1979, however, soaring oil prices had once again shifted the current account from record surplus into record deficit. The yen fell sharply between the spring of 1979 and early 1980, finally bottoming out in April this year when the rate stood at more than Y260 to the dollar. From then on things began to look up as a yen defence package announced early in March by the Ministry of Finance belatedly took hold, and when U.S. interest rates at last passed their peak.

The March 1980 defence package took a completely different approach to managing foreign exchange problems from the strategy adopted after the 1973 oil/yen crisis. Rather than attempting to stop the outflow of capital, the authorities encouraged an inflow. The steps included freeing interest rates that banks can pay on "free yen" deposits by foreign governments and central banks; allowing Japanese banks to make medium-term "impact" loans to Japanese companies, and also to transfer (under a quota) Euroyen from their overseas branches. Officials announced they were also prepared to activate swap lines with the New York Federal Reserve, and that West Germany and Switzerland would back up the Bank of Japan.

Impressive

The result has been impressive. The Ministry of Finance estimates that free yen (which simply means yen that can be freely moved in and out of Japan) deposits by central banks increased at a rate of over $1bn between April and June. "Impact" loans to Japanese corporate borrowers hit $600m in May. In the space of two months from the start of April the yen appreciated nearly 20 per cent to the Y215-Y200 range which MoF feels is an appropriate level.

Senior officials at MoF were particularly anxious to attract an inflow of funds from the Middle East oil producers, and missions were despatched to offer national bonds and encourage other investment. The authorities were a bit red-faced about the fact that they had turned down an offer from Saudi Arabia just last year to roll over a $1bn deposit made five years ago to help banks through an international credit crunch. The Finance Ministry did, however, manage to get an agreement to place a fairly large sum of national bonds with the Saudis.

The recent inflow of foreign funds into Japan, especially from the oil producers, was large enough to raise current estimates of offshore yen to the equivalent of more than $15bn (or more than twice the figure of 18 months ago). The MoF is paying very close attention to this development, and is in fact planning to make its first disclosure ever of estimates of non-resident yen holdings, similar to estimates made by West Germany. This will include yen deposits, foreign holdings of yen bonds and equities, etc.

At the root of all these shifts, of course, is the OPEC petrodollar surplus (to which Japan will contribute around $57bn this year as the price for imported oil). The sudden spurt of yen into international hands is the direct result of Japan's need to finance the oil-created deficit "below" the bottom line of the balance of payments. Japan is also playing a significant role in the overall recycling of petrodollars.

Estimates of petrodollar flows are basically guesswork. Government and private estimates, however, indicate that Japan is now recycling about 10 per cent of OPEC's wealth, after a late start. This is in line with Japan's share of the world GNP. One Japanese bank guesses that the Japanese share breaks down roughly (as of April) as follows: Euroyen deposits in Japanese banks overseas: $3-4bn (out of total OPEC Eurocurrency deposits of $12-15bn); free yen deposits: $3-4bn; other foreign currency deposits in Japan: $5-6bn; and anywhere from $7.5 to $16bn in Japanese stock and bond holdings.

Takeovers

Japan has not been as successful at getting the Arabs to invest in Japanese stocks as it might like. This is partly because there are few Japanese advising the Arabs on where to invest. Stock buying has received a lot of attention since it was disclosed that the Arabs were buying shares in some of Japan's better known companies. The Government says, however, that in no case is the percentage of shares now held more than 1.5-2 per cent. Nobody in Japan is expecing Arab takeovers, and it seems that the Arabs, with much less experience in investing in Japan than the U.S. or UK, will be rather cautious anyway.

The yen's position as a world currency is still minor when compared with that of the dollar. There are estimated to be over $60bn in Eurodollars in the market. There is also no reason to think that Saudi Arabia or other oil producers are soon going to begin accepting payment for oil in yen. But as long as Japan's economy continues on a sound course, and the yen maintains its purchasing power, the process of internationalisation appears unlikely to go into reverse.

هكذا من الأصل

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The result is the New Bluebird range – the quietest, most balanced and refined cars that Nissan designers have created. At a price that represents the ultimate in sheer value!

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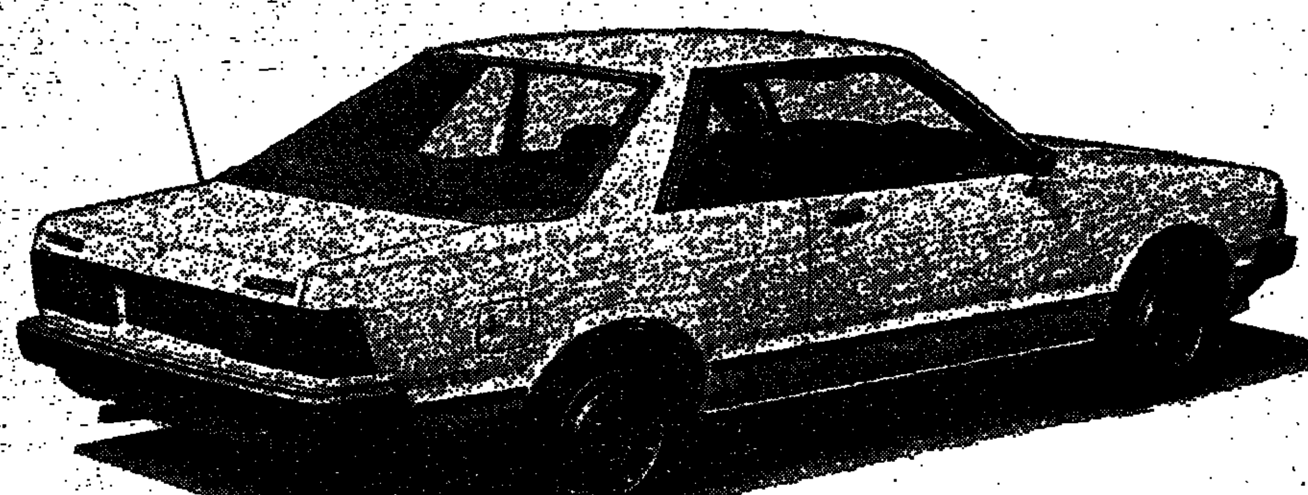

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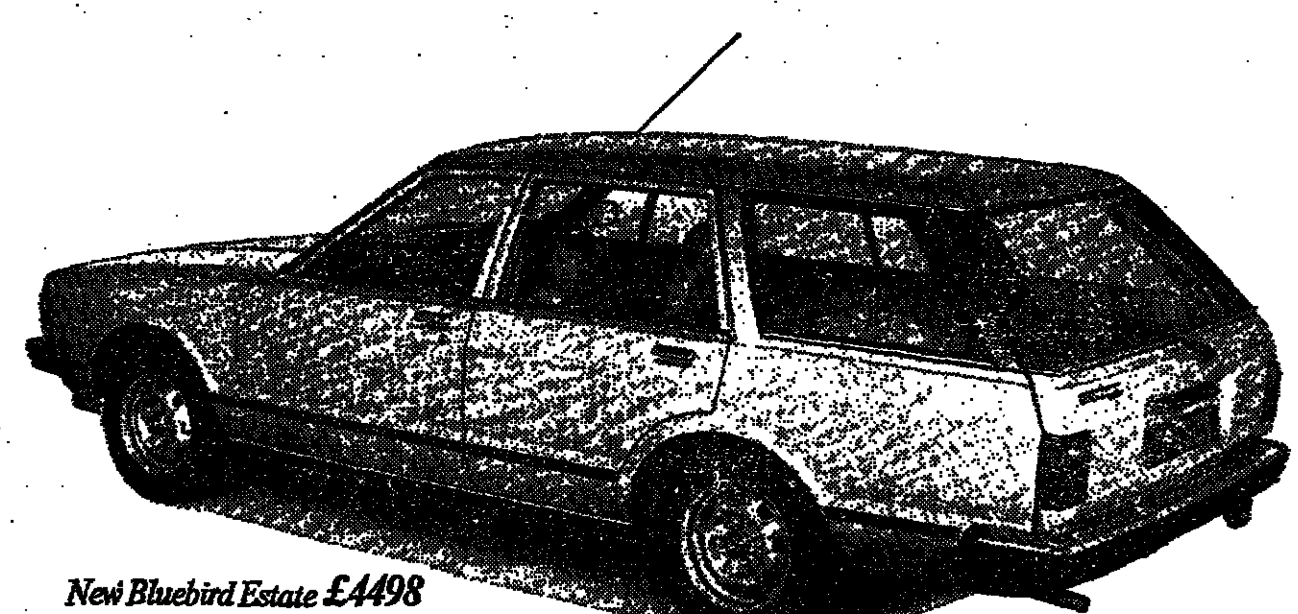

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Spectacular plunge into deficit

BALANCE OF PAYMENTS

CHARLES SMITH

JAPAN'S BALANCE of payments has been dramatically affected by the second world oil crisis. In fiscal year 1977 (ending March 31, 1978) Japan registered the largest current account surplus in its history—a massive and embarrassing $13.9bn. A year later the current account was in the black by $11.8bn despite efforts to reduce the surplus by artificially boosting imports. But by the spring of 1980 the situation had been spectacularly reversed.

The current account for the 12 months ending last March was in deficit by $13.9bn, representing a net deterioration of $24bn in Japan's external payments situation in a single year. The change was the result largely of the doubling of crude oil prices, although the delayed effect of official import-boosting and export-restraining programmes also helped to increase the deficit.

Discussion

The sudden appearance of what is far and away the largest overseas payments gap in Japan's history has prompted two types of discussion inside Japan. The first revolves around the short-term problem of how to finance the deficits of 1980 and 1981 (when the current account should still be in the red, if not so heavily as this year). The second is concerned with the medium-term outlook.

Until a year or two ago it was widely assumed that Japan had reached a stage in its economic development when it could expect to be in semi-permanent surplus with the rest of the world (because of the competitive strength of the main Japanese export industries). What is now being asked is whether Japan has arrived at a situation of permanent or semi-permanent deficit.

Views about the short-term payments outlook for Japan range from the relative optimism of those who believe that the deficit for fiscal 1980 (ending March next year) will be about the same size as that for fiscal 1979 to the relative pessimists who forecast a current account gap of up to $20bn.

Factors involved in the short-term debate include the price of oil — which is vital since every additional $1 per barrel adds $1.7bn to the cost of Japan's imports — and the yen exchange rate. This also matters a good deal, because a dearer yen means higher dollar prices and therefore larger dollar revenues from Japan's exports.

Two questions about which there appears to be relatively little disagreement are now fast Japan's exports will grow in volume during the year, and to what extent the volume of imports will stagnate or diminish. Export volume growth of between 5 and 10 per cent is generally assumed as likely (although the volume of world trade during 1980 may not grow by more than 2 per cent) while imports will almost certainly stay at low levels. Despite these two factors Japan will probably end 1980 (fiscal) with a substantial visible trade deficit.

Oil imports, which are expected to account for nearly 50 per cent of a total import bill of around $120bn will bear the main blame for this, although the actual quantity of oil imported during the year seems unlikely to exceed that of 1979. Imports of manufactured goods, particularly of consumer manufactures from other industrial countries, will pobably diminish in volume if not value.

The combination of a fair-sized trade deficit in 1980 with Japan's normal invisibles deficit of $11bn or so produces the prospect of current account deficit of at least $13bn—in other words of a payments gap as large or larger than that of 1979. An important difference between this year and last, however, is likely to be that the deficit on long-term capital transactions will be substantially reduced. This will be the result of a number of factors almost all stemming from deliberate official action.

Overseas yen lending by Japanese banks and foreign borrowing from the Tokyo capital market (through the medium of the so-called samurai loans) will be less than in 1979, although these two activties will still represent a drain on the long-term capital account. On the plus side there should be, and to some extent already has been an inflow of petrodollars as part of the recycling process of the OPEC surplus accumulated through last year's increase in oil prices.

These two positive factors will not be enough, however, to turn the long-term capital balance from red to black, still less to counteract the deficit on current account and produce an overall balance in the basic balance of payments. A deficit on the bottom line will have to be covered inby the "below-the-line" financing including overseas borrowing by Japanese banks. Japanese commercial banks are already heavily indebted on their short-term oversea transactions. The short-term overseas deficit position of the city banks stood at $24bn in net terms at the end of March.

Uncomfortable

The short- to medium-term outlook for Japan's payment situation can be described as uncomfortable but by no means unmanageable. The longer term outlook remains rather vague but at least a number of general points can be made about it.

One is that, as a major industrial country with a roughly 10 per cent share of the world's GNP, Japan can expect to continne getting its share of recycled petrodollars—always providing it does nothing to deter OPEC investors. A second point is that a too strenuous effort to restore a current balance by promoting Japanese exports might land the Japanese in trouble with their trading partners in the West—who would be at the receiving end of such exports.

With these basic principles in mind Japan will probably strive for a very gradual rectification of the payments imbalance over the next few years while placing heavy stress on more general economic objectives such as controlling inflation and maintaining a stable yen exchange rate. If Japan's economic performance shows up well against that of Western countries on an overall basis the nation should be able to keep on attracting OPEC funds even if the balance of payments stays in deficit, it is argued at the Bank of Japan (BOJ).

On the other hand officials baulk at the suggestion that Japan should happily accept the prospect of being permanently in the red on current account. "We should be able to hold out some hope of eventually recovering a balanced position—if only to convince OPEC that Japan is a safe and worthwhile investment destination," says a BOJ official.

The BOJ does not believe that Japan can achieve a balance on current account by cutting its invisibles deficit, or at least not primarily by this means. A monthly invisibles deficit of some $700m to $800m is assumed to be a structural feature of Japan's payments position, in part because of the heavy outflow expenditure on tourism and travel (which could be corrected only by subsidies to Japan's tourist industry, which would arouse criticism elsewhere.

The deficit on financial services could be reduced by building up Tokyo as an international financial centre on the model of London and measures to achieve this are believed to be under study at the Ministry of Finance. The international earnings of Tokyo, however, would probably not be enough to offset Japan's spending on banking and insurance services elsewhere in the world, so that this would be a palliative rather than a cure for the invisibles deficit. Income from Japanese overseas loans and investments can be expected to grow in future and eventually become an important source of invisibles income, but this will take time.

With invisibles acting as a continuing drain and with the obligation to maintain an overseas aid programme, Japan will feel itself obliged to aim for a surplus on visible trade in future. The surplus will probably never again rise to the astronomic heights of 1977 and 1978 when Japan earned $20bn a year from its overseas trade despite being the nation most critically dependent on imported oil. It will, however, almost certainly become large enough to cause intermitent frictions with other major trading countries including the U.S. and Western Europe.

The Japanese will try to resolve these frictions by supplying products to the West which do not compete directly with Western industry (e.g., video tape recorders) and by inviting their friends in the West to focus on broader issues rather than bilateral trade relationships. They do not delude themselves, however, that Japan can pay its way in the world without stirring up some resentments among other trading nations.

Greater world involvement

FOREIGN POLICY

CHARLES SMITH

TWO SETS of events are forcing Japan to adopt a more active role in world affairs following a long period of diplomatic inactivity. The declining margin of American military superiority over the Soviet Union in the Western Pacific has meant that Japan can no longer take its security for granted. Simultaneously Japan has been obliged by worries about the world oil situation to start paying close attention to its relations with resource-producing countries.

Both developments have produced an impact on what remains Japan's most important external relationship—its political, military and economic alliance with the U.S. But for the time being it is the energy crisis, rather than the more gradual change in the military balance, that seems to be provoking the largest number of foreign policy adjustments.

Simple notion

Until the onset of the first oil crisis in 1973 Japanese foreign policy was based on the simple and satisfactory notion that nothing could go seriously wrong so long as the American "special relationship" remained in good condition. The Japan of the early 1970s was already the world's largest importer of oil and other important materials such as iron ore and coking coal. But little thought was given to the development of a policy stance towards the countries producing these vital resources.

Japan relied on the American and European oil "majors" for more than 80 per cent of its crude oil imports at the time of the 1973 crisis and on the U.S. State Department for guidance on its Middle Eastern diplomacy. Relations with Western Europe were cordial, as befitted the ties between two major American allies, but singularly lacking in content.

The panic about Japan's oil supplies which resulted from the 1973 oil crisis led to the first important departure from this system. In November 1973, in the face of strong opposition from Dr. Henry Kissinger, Japan announced a significant shift in its position on the Palestine question which for the first time placed it closer to the Arabs than the Israelis. The change involved placing a pro-Arab interpretation on UN resolution 242 instead of the "even-handed" interpretation which the Japanese Foreign Ministry had favoured previously.

Two directions

After its first decisive break with the U.S. over the Middle East, Japanese policy towards the region evolved in two directions. Official attitudes towards the Palestine Liberation Organisation (PLO) became progressively more favourable, culminating in what the Japanese Foreign Ministry claims to have been the most "advanced" Western position towards the PLO until the EEC redefined its Palestine policy at its recent Venice summit. Simultaneously Japan embarked on an all-out effort to develop a two-way economic relationship with the Arab world (instead of simply buying Arab oil through the majors).

This effort took the form of offering to assist Arab countries with the supply of heavy industrial plant and of buying oil direct (either on a direct deal or government-to-government basis).

The policy got off to a highly publicised start when no fewer than three Japanese Ministerial missions toured the Middle East (including non-oil producing Arab countries) in the winter of 1973-74. It received a label—"Resource Diplomacy"—a year or so later and a few months after that Japan was starting to face criticism from Europe for selfishly diverting its aid to wealthy Arab governments in order to secure oil supplies.

Seven years after the first abrupt changes in Japan's Middle East policy a number of painful lessons seem to have been learned. One is that a fruitful bilateral economic relationship with the region may take time to build up, and may have to be based on something more than the supply of a few massive industrial complexes. A second lesson concerns the need for a multilateral response to the oil crisis.

Japan's "go-it-alone" policies vis-a-vis the Middle East have been supplemented in the past year or two by a much greater disposition to consult with other importing countries, including those in Europe, on how to deal with energy problems. What has not changed since 1973 is the Japanese perception that leaving everything to the U.S. is no longer a viable method of handling issues which could threaten Japan's fundamental economic or political interests.

A classic instance of Japan's more flexible and independent approach to a tricky diplomatic issue was provided by the crisis that erupted in November 1979 when Iranian students seized the American Embassy in Tehran and the U.S. responded with a call for economic sanctions against Iran by its Western allies.

Japan was in no position to reject the American call outright, given the importance of its ties with Washington. But the prospect of having 13 per cent of its oil imports cut off in retaliation for stopping exports to Iran was not exactly inviting. Nor was Japan prepared to sacrifice its interest in the $3.3bn Bandar Khomeini petrochemical project in southern Iran in which the Mitsui group of companies is deeply involved.

Japan confronted the dilemma of what to do about Iran first by drawing a distinction between sanctions in general and the Bandar Khomeini project is particular (where Mitsui continues to be involved with what appears to be American acquiescence). It then hitched itself to the European bandwagon by announcing that it would follow closely decisions made by the EEC Council of Ministers with regard to Iranian sanctions. Iran's exports of oil to Japan were suspended in April, but over a price dispute (involving Japan's refusal to pay $35 per barrel for its imports) not as a result of sanctions.

Japan's strategy in the Iranian affair appears to have been duplicated in the case of policy towards the Soviet Union following the invasion of Afghanistan. In the first weeks after the Soviet action a virtual halt was called in economic relations with Moscow; for example, a visit to Tokyo by a senior Soviet trade official who was to have discussed credit for a major steel pipe contract was postponed. Within a few months, however, a gradual resumption of contact took place following similar moves in Europe. In late June, after closely observing similar moves by West Germany, Japan granted an entry visa to a Soviet Vice Minister of Trade who duly signed an agreement for the extension of a major export import bank loan to finance the steel pipe exports.

Relations with third countries such as Iran and the Soviet Union, are not the only areas where Japanese foreign policy has shown signs of diverging from U.S. policy in recent years. The two countries have also disagreed and continue to disagree in their attitudes towards the development of peaceful nuclear energy and on nuclear non-proliferation.

Former Premier Takeo Fukuda took a firm stand on this question during a 1977 visit to Washington when President Carter attempted to freeze Japanese moves to reprocess spent nuclear fuel from its American light-water reactors on the grounds that this would run counter to a domestic election pledge to prevent production of plutonium. Three years later the issue of whether and how Japan can reprocess its spent nuclear fuels still remains partially unresolved, but Japan's position on the matter has been made clear to the U.S.—and turns out to have a good deal in common with the EEC position.

The fact that Japan now frequently finds itself disagreeing with the U.S. and agreeing with Europe on tricky international issues does not mean that it is on the point of exchanging a special relationship with the U.S. for a special relationship with Europe. What it does appear to mean is that Japan-U.S. relations are becoming somewhat more like U.S.-Europe relations, with a degree of give-and-take on both sides.

Central

Japanese foreign policy planners are acutely aware of the need for their country to make a bigger "positive input" into the American alliance by, for example, increasing Japan's responsibility for its own defence and perhaps even for regional security. They are in no doubt, however, that the Tokyo-Washington axis remains central to Japanese foreign policy just as the American relationship is crucial to Western Europe.

Future Japanese Foreign Ministers will probably try to build on progress made during the past 18 months in improving personal contacts with Western leaders, and in ensuring that the Japanese view is heard clearly at major international gatherings. Japan does not feel that it is quite as free to speak its mind today as the leaders of countries such as France and West Germany appear to be, but the trend is in that direction.

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Long-term strategy aims at energy balance

ENERGY CONSUMPTION

MARK MEREDITH

IT SEEMS fashionable to perspire slightly in the offices of the Energy Conservation Centre in Tokyo. The Vice-President has removed three of the seven sets of strip lighting in his office and the visitor is asked if he would like to remove his jacket as the air-conditioning operates at an exemplarily low level.

Japan's awareness of the energy crisis, of the need to reduce oil consumption, to reduce energy waste, cut back on the use of electricity and to press on with finding alternative sources of power is more obvious than in other Western industrialised countries.

This sensitivity is largely due to Japan's vulnerability to possible energy shortages. About 89 per cent of the fuel needed to power this industrial giant is imported and there is precious little in the way of home-produced fuel to fall back on if these imports were to be threatened. Nor are there friendly allies close at hand with more plentiful stocks or resources to help Japan through a bad patch.

The Japanese have worked out a medium to long-range energy strategy which works like this. From 1985 onwards the Government wants to keep the level of imported oil constant at about 366m kilolitres (6.3m barrels a day) and to raise the contributions from other energy sources such as nuclear and coal-fired power as well as alternative energy to meet the continued increase in demand.

Demand meanwhile will be restrained through an active conservation policy. For example, in 1985 overall demand is likely to equal 662m kiloletres a year (11.4m barrels a day) of oil but conservation should be able to reduce this to 502m (8.65m b/d).

In terms of imports only France approaches Japan in terms of dependency on foreign supplies, bringing in 78 per cent of its energy requirements per year. The U.S. imports only 19 per cent.

For Japan, with the highest growth rate in the Western industrialised world, the need to cut back on energy has presented major problems. The Government's plans are to gear together reduced consumption and the development of alternative energy sources to maintain a high rate of growth—5 or 6 per cent.

To some critics this plan ill-suits Japan's real requirements. Should Japan drive itself headlong into an international economic slowdown, producing exports for an international market which is contracting through recession and with a growing sensitivity to heavy imports?

Mr. Takeo Tomitate, director of the Research Division of the Institute for Energy Economics, feels the high growth rate in the fact of the energy crisis is wrong. He likens it to ordering an obese middle-aged man to eat a great deal after excessive jogging.

"The trouble is that a preoccupation with an illusion of rapid growth, which is unfit for actual physical strength, has led Japan to map out unrealistic targets for development of alternative energy sources without any specific measures for their attainment," he wrote in a recent assessment. Real growth targets in the face of mounting oil bills should be more appropriately set at 3 to 4 per cent, he believes.

The Institute for Energy Economics sets much lower estimates for consumption over the next 10 years in line with lower growth rates, forecasting a potential supply of 584m kilolitres of oil equivalent in 1990 compared with the official forecast of 700m.

Nevertheless the Government considers its growth targets of 5 to 6 per cent as vital to maintain employment and profitable levels of production.

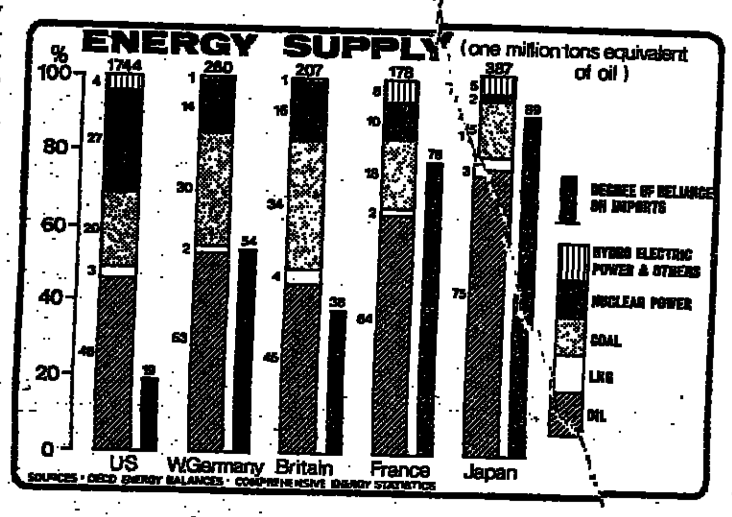
Reduced growth, not to mention reduced consumption, confronts the Japanese at a time when they are developing a real feel for prosperity. Booming consumer and leisure industries make it hard to think of rationing.

Lightly

Yet in conforming to the Government's ambitious energy conservation programme, the individual energy consumer in Japan comes off fairly lightly. He loosens his tie at work, uses his air-conditioning less in summer and drives less. Much of Japan has a moderate winter compared with Western Europe and heating bills are not as heavy. According to the Paris-based International Energy Agency, Japan has the lowest per capital energy consumption in the residential and commercial sector.

But the savings in industry are the ones that count. More than all the other leading industrialised nations, industry uses a larger share of total energy consumption—it works out at nearly 60 per cent of overal domestic usage. Here the application of conservation has been impressive and at times ingenious.

Just over a year ago the industrialised nations met in Tokyo and agreed to reduce dependence on oil. Following up this meeting, the International Energy Agency prescribed a five per cent cut in oil consumption for its members.



Moves were already afoot in Japan to cut back. The energy Conservation Law was passed in June last year, marshalling the bureaucracy, in particular the Ministry for International Trade and Industry (MITI), to promote energy saving.

Financial subsidies and tax benefits were made available for energy-saving equipment and to encourage a frugal approach to power consumption.

Meanwhile the Sunshine Project, created in 1974 after the first energy crisis, promoted new alternative energy technology including solar, geothermal, coal gasification and other methods of power generation. The Moonlight project at the same time explored new conservation technology.

In industry, where the big bills are paid, came the greatest achievements.

The steel industry increasingly adopted the continuous casting system of producing crude steel. The system uses two-thirds less energy than traditional methods of ingot-making which require reheating. The industry also recycle the gas pressure for the blast furnaces to generate electricity and recovered gas for the steel-making furnaces for re-use in reheating processes. The result was a 9 per cent saving in energy between 1973 and 1978.

In the motor industry improved control in steel forging, waste heat recovery in painting and improved insulation produced a 21 per cent reduction in electricity and fuel bills over the same period. Japanese cars meanwhile showed an 11.2 per cent improvement in mileage between 1973 and 1977.

In the cement industry the installation of suspension heaters for the limestone kilns increased efficiency and reduced energy consumption by 16 per cent. Conservation in the chemical industries produced a 17.2 per cent reduction in fuel costs between 1973 and 1979, according to the Conservation Centre.

In the aluminium industry reduction of the amount of heavy oil used in pre-heating together with other rationalisation measures brought about a 6 per cent energy reduction.

Power stations meanwhile increased their thermal efficiency, making more of the oil or coal they burn. Energy consumption in the transportation sector has been lower in proportion to that of the U.S., Britain, West Germany and France.

Inescapable dependence

OIL

RICHARD HANSON

IN THE days when it was cheap, oil helped Japan perform economic miracles which astounded the West. It has become, however, the acknowledged "Achilles heel" of the economy and may retain that position for at least the rest of this century.

First, Japan can do very little to reduce its dependence on imported oil, supplies of which are becoming harder to secure, and more expensive, because it has virtually none of its own. Secondly, its efforts to cut back on the amount of oil used in the economy will probably fall short of the targets that Government planners are aiming at. This is mostly because other energy sources will be slow coming on stream even up to the end of this century. It is also doubtful whether Japan will be able to use the oil it buys any more efficiently than it already does to maintain real economic growth at a desirable pace.

Combination

Japan absorbs nearly 9 per cent of world oil output, roughly the share that its economy accounts for in the world GNP. Last year 76 per cent of those imports came from the Middle East. More than a quarter of the 5.4m barrels a day Japan buys on average comes from one country alone, Saudi Arabia, a place few Japanese know very well. At present the combination of a pricing dispute and U.S.-inspired sanctions has stopped shipments from Iran completely, a country which last year provided 13 per cent of Japan's oil.

It is very easy indeed to paint a gloomy picture of Japan's extreme vulnerability in terms of oil. The fact is, however, that despite some near-misses and a good deal of stumbling over the seven years since the first oil crisis, Japan so far has not suffered too greatly from its dependence on oil. This is mainly because it has been able to afford the cost of dearer oil imports (although not without incurring a huge current account deficit). At the same time Japan has yet to face a serious disruption of its supply lines.

Japanese officials can be fairly certain that this year at least they will have all the oil they need as a result of reduced demand and healthy supplies worldwide. The volume of Japanese oil consumption has remained static for about the past five year. Some experts are predicting that use could actually fall this year by about 200,000 barrels a day below last year's 5.4m barrel average. Prices for many petroleum products have already shown signs of dropping. If further disruptions in supply do occur, Japan now has more than 100 days' consumption in private and official stockpiles, an amount which is actually putting a strain on storage facilities.

Japan admits that to have allowed itself to become dependent on oil for nearly three quarters of all forms of energy it consumes was a serious mistake. It would have been difficult, however, to have done otherwise and still achieve the high economic growth it did. The Government itself was the driving force behind the switch from coal to oil for power generation in the late 1950s and 1960s, the conversion, ironically, was just about completed in time for the December 1973 quadrupling of OPEC oil prices. (Japanese planners can take some comfort, however, from the fact that burning oil did help reduce air pollution, a factor which is making reconversion back to coal difficult).

The Government now realises all too well the dangers of heavy dependence on oil. It has set a target of reducing oil to 50 per cent of total energy consumption by 1990. This assumes, however—and very optimistically—that nuclear power can reach 53m kW (compared with 15m kW this year) and that steam coal imports will jump to 53.5m tonnes a year (from 2m tonnes in 1979). The prestigious Institute of Energy Economics, a private group, forecasts that nuclear power generation will more likely reach only 30-35m kW and that steam coal imports will rise to 28-33m tonnes.

Leaving aside the question of overall demand for oil, Japan has also learned the dangers of depending too heavily on any one source of supply. Top priority has thus been placed on diversification. The importance of finding more oil supply sources came clearly into focus last year when Japan found itself progressively deprived of supplies from the oil majors as a result of a "third party" dispute between Iran and the U.S.

The majors provided Japan with most of its oil from the time when oil imports were resumed in 1950 until last year, when the Iranian crisis disrupted world supplies. During 1979, however, the majors, with a few exceptions, stopped supplying oil to non-affiliated companies in Japan.

A little history is useful in understanding the complex organisation of the oil industry in Japan. In 1960, to satisfy OECD rules on free trade, Japan reluctantly ended a system of quotas on oil imports which had kept the majors at arm's length throughout the 50s. Arm's length, of course, still meant that all of Japan's oil was bought through the majors.

SOURCES OF OIL IMPORTS

(1979—per cent)

Saudi Arabia	26.9
Indonesia	14.3
Iran	13.0
UAE	10.2
Kuwait	7.8
Iraq	6.1
Kuwait-Saudi neutral zone	5.9
Malaysia/Brunei	5.8
Oman	3.5
China	3.1
Others	3.2

The fear was, however, that the big international companies would use this new freedom to take complete control of Japan's domestic oil refining and distribution industry. The Government therefore devised a petroleum law (1962) which gave it the power to regulate the construction of refineries and to influence pricing. More important, the Government set about creating a domestic oil industry to compete with the foreigners and their affiliates.

The intention was to keep a 50-50 balance between the foreign and the domestic portions of the oil industry, and foreigners were only allowed to take 50 per cent shares in affiliates (except those already established). The concept has not worked very well. Domestic refiners generally have fared worse than the more numerous foreigners — in some cases because their plants came on stream just as the first oil crisis hit.

A further re-organisation of the industry has become even more urgent since the majors stopped supplying the non-affiliates. Some Japanese companies are having trouble acquiring adequate supplies, and are seeking to co-operate with others which have enough. The majors have reduced their share of Japan's oil imports for 75 per cent of the total five years ago to about 45 per cent now. To replace these very large amounts the big Japanese trading companies (and some of the oil companies themselves) have nearly doubled in one year the amount of oil they buy directly from oil producing countries, or from the spot market.

The notorious Japanese scramble for spot oil late in 1979 to make up for the loss of crude from the majors was one result of this shift.

To a lesser extent Japan has been able to diversify sources through government-to-government (GG) agreements. There are four such agreements at the moment—with Iraq, Indonesia, China and Mexico. "GG" oil accounts, in theory, for 7-8 per cent of total imports. But the agreements by no means assure supplies.

Assured

China, for example, has indicated it will not be able to fulfil promises to increase shipments over the next two years. Mexico has quietly assured Japan that it will let shipments rise to 300,000 b/d by 1982 from the level of 100,000 b/d expected to be reached at the end of this yeas. But Mexico will not become a really major supplier of oil to Japan for at least another decade. And it expects, meanwhile, that Japan will be very generous with aid to several of its key development projects.

The other logical method of securing oil supplies—by participating in exploration and production from the start—has been seriously neglected by the Japanese. There is only one Japanese company producing oil overseas in any quantity, the Arabian Oil Company, in a concession in neutral waters between Saudi Arabia and Kuwait.

Altogether, oil from Japanese-related developments amounted to about 8.5 per cent of supplies last year. This could increase if offshore explorations in Soviet Siberia, between South Korea and Japan, and in Japan's own continental shelf prove successful. Expectations, however, are pitched low.

Japan has no alternative but to hope that the oil crisis it must expect to suffer over the next few years will end benignly. This was certainly the case after the Iranian crisis, when production from other OPEC countries rose to fill the gap. Perhaps the greatest lesson Japan has learnt since the first oil crisis is to accept this fate a bit more calmly.

Comeback depends on cost and availability of supplies

COAL

MARK MEREDITH

HORDES OF joggers emerge each workday noon to run around the moat of the Emperor's palace in Tokyo. Some of them, pausing out of breath at a stoplight, doubtless reflect with relief that the fitness fad had not caught on 15 years ago. For in 1965, in the area of Tokyo Bay, seven coal-fired power stations belched smoke and fumes into the air, helping to establish the Japanese capital as one of the most polluted cities of the world.

In those days the straightforward solution was to move into cheap and easy-to-handle oil. Today the smog has improved considerably

By the time of the two oil price shocks of the '70s, Japan had virtually eliminated coal-fired power and largely replaced it with oil. Oil now fuels half the 245 power stations in Japan compared with 20 per cent of oil thermal power in Europe and the U.S.

In the search for a way out of oil following the price rises, coal presented a clear option. In its long-range plans, the Government-backed Electric Power Development Corporation (EPDC) calculated that demand by 1990 would nearly double to about 840bn kWh.

Nuclear power and liquid natural gas would fuel about 30 and 25 per cent respectively of power output. Oil would still be needed to run about 25 per cent of requirements—or less if possible.

Coal, under the plan, would make a comeback from its present 4 per cent of electrical *output to fuel between 9 and 11* per cent.

Moving back—part of the way—into coal meant the construction of coal-fired power stations or the conversion of oil-fired to coal; the development of supporting infrastructure for coal, *including transport* and stockpiling centres; the development of secure and reliable trade links for the import of steaming coal for the power stations because Japan's own coal production was costly and limited. It also meant depending on a manageable price for coal imports.

Sixteen of the 245 power stations in Japan run by the nine private power companies are still fired by coal. Most of them are small stations in remote areas with a relatively low output. The EPDC, which follows through Government energy policies and operates the national *grid system, has begun* work on five new stations and another five are planned. Many are on the coast, with facilities to off-load ships and stockpile coal.

Efficiency

The Ministry for International Trade and Industry, which oversees the energy programme, also plans to convert 10 per cent of the oil-fired stations to coal. Experiments are also being made to combine coal with methanol.

At the same time the thermal efficiency of power stations has been improved so that most of the heat does not go up the chimney. Japan ranks about even with France and the UK in this respect.

But the prospect of a return to smog has brought considerable opposition from an environmentally aware Japanese public. The EPDC says its power stations have met the various *environmental standards* but the successful development of depollution systems to remove the hazards of dust, sulphur and nitric fumes seems some way off. Tests on the "total flue gas treatment system" by three companies including the Tokyo Electric Power Company are not due to be complete until September *this year*.

More fundamental problems with the development of coal arise with the establishment of supply lines abroad. It seems that many of the projections for coal-fired power were based on prices that existed before the revival for coal.

Japan imported only 1m tonnes of steaming coal—the kind used for power stations—last year. Imports are due to rise to nearly 22m tonnes in 1985 and 80.5m in 1995.

The power companies needed long-term coal and secure imports of policy and hoped that through a [illegible] of investments in mining and coal supply infrastructure in coal-producing countries, they would be able to import coal at reasonable rates over long periods.

What the power companies did not expect was the sudden demand for steaming coal from the cement industry in Japan, which wanted about 7m tonnes this year after successful conversion of its kilns from oil to coal. This demand helped bump up the price of steaming coal from Australia, for example, from just over $20 a tonne to about $35 fob.

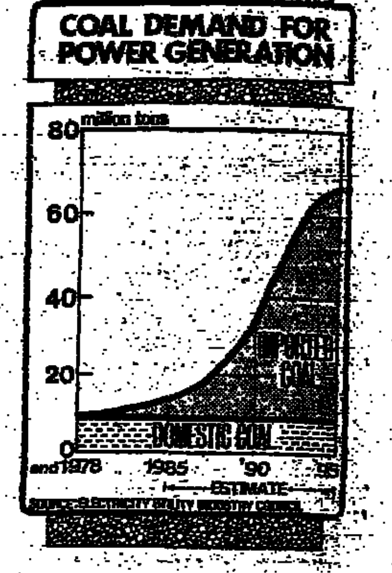
Foreign coal prices generally rose about 70 per cent in the past year, causing some painful re-examination of the eventual cost of coal-fired power.

Imports of steaming coal were tiny beside the long-term contracts for coking coal to supply Japan's steel industry. Steel required over 50m tonnes of coking coal last year and its requirements were expected to rise with signs of a return of steel demand and the use of more coke to replace oil in blast furnaces.

Australia is by far Japan's biggest source of coal: Australian mines supplied over 40 per cent of imports in 1978, with the U.S. and Canada supplying about 20 per cent each.

The extensive programme of investment in Australian mines was paying off in secure sources of supply but not in price.

Another reverse came with an Australian decision to reject an equity bid by the EPDC to acquire a 19 per cent stake in the Blair Athol Coal Company of Queensland. After examining the amount of foreign capital going into the mine, the Government said that the Japanese proposals went against its guidelines of retaining 50 per cent Australian ownership. International demand for steaming coal was reviving fast. In the view of economists at the Institute for Energy Economics the gap between high grade coal and low grade oil was starting to narrow.



Coal suppliers were also heartened by the growing prospects for coal liquefaction. Rival Japanese projects were under way in Australia. The overall effect on prices did not please Japan's electricity power managers.

Clash

A disappointed Mr. Satoru Murai, Director of Fuel for the EPDC, *told the Japan-Australia* coal conference in Canberra earlier this year: "... the current situation has reached the point where our different positions (suppliers and users) can cause a fundamental clash of views about pricing under the kind of long-term contract which guarantees long-term demand and facilitates planned production. If we are going to be affected by spot prices every year, we cannot establish a stable relationship with one another."

Australian coal producers did not find convincing the talk of diversifying to the U.S., Canada, South Africa—not to mention China.

At home the Japanese responded by starting negotiations between coal users in the steel, cement and power industries to work out a consensus in the best Japanese tradition on orderly market purchases to obtain the best supply conditions.

One proposal from the Coal Development Company is for the creation of coal centres in the north and south of Japan, each with a capacity of 10m tonnes of coal a year to allow for stockpiling against price fluctuations and supply interruptions.

The consumers could take little encouragement from Japan's own coal mines. The few remaining mines produce about 20m tonnes a year but costs are high and attempts by the mines to increase prices have only driven users to look to imports. The industry now relies extensively on subsidies and capacity is not expected to expand over the next 10 years.

Programme faces special problems

NUCLEAR POWER

CHARLES SMITH

THE SUCCESS or failure of Japan's attempt to reduce its dependence on oil to 50 per cent of total energy requirements by 1990 depends, most critically, on what happens to its nuclear power *programme.* Nuclear power has received the heaviest emphasis in the Government's energy development strategy to date (at least in terms of budgetary spending) because it is cheap compared to either oil or liquid natural gas and clean (at least in a conventional sense) compared to coal.

Nuclear power in Japan, however, as in other countries, has encountered some very special problems of its own. These can be classified under two broad headings of "public acceptance" (meaning the extreme difficulty of getting the general public to agree to the siting of new power stations because of fears about safety) and "international political" (meaning the complex series of issues standing in the way of the development of a nuclear fuel cycle and the introduction of new and more economical types of reactors). As a result of the two sets of problems Japan's targets for the development of nuclear generating capacity have been repeatedly scaled down—and may yet have to be cut back further.

Infancy

At the time of the first oil crisis (1973) *when actual* nuclear power generation was in its infancy it was hoped that 60m kW of electricity could be produced from nuclear reactors by the mid-1980s. The situation today is that 21 reactors are in operation with a total generating capacity of 15m kW (equal to about 11 per cent of Japan's overall power generating capacity). A further seven reactors are under construction with a combined capacity of 5.8m kW and public acceptance problems have been resolved in the case of seven more (combined capacity 7m kW). This means that Japan has "in the bag" a total of around 28m kW of generating capacity.

Allowing for the time required to complete construction it is expected that roughly 25m kW of this total will come on stream by 1986, a year after the deadline set in the latest "modified" Government target for nuclear power. The same "modified" target calls for generating capacity to hit 51m to 53m kW by 1990 but officials at the Ministry of International Trade and Industry responsible for co-ordinating the nuclear power station building programme admit that this will be difficult to achieve. It would call for the approval over the next five years or so of between 4m and 5m kW of generating capacity per year, a much higher figure than has been achieved to date.

The approval of new nuclear power station building projects was set back seriously after the Three Mile Island accident in the U.S. in the spring of 1979 but has recently begun to move ahead again—though with the addition of new and more *time-consuming* procedures. Apart from the time required to go through legally required procedures, the selection of sites for a Japanese nuclear power station is usually preceded by a prolonged and time-consuming bargaining session between the electric utility that will operate the

CONTINUED ON NEXT PAGE

Three main areas of research

NEW ENERGY SOURCES

MARK MEREDITH

NEXT TO the U.S. Japan is the world's most energy-hungry nation. It accounts for 10 per cent of the energy consumed by the world; it needs to import 89 per cent of its fuel, and 75 per cent of its energy requirements are from oil.

Faced with rising oil prices and increasingly uncertain or unstable petroleum supplies, the need for alternative source of energy are as obvious as they are imperative. After some experimentation and a long look at the options, Japan has narrowed down its search for alternative power to three areas: solar power, conversion of coal to oil and geothermal power from Japan's volcanic strata.

The cost is horrendous—Y2,400bn budgeted between now and 1990. But then the projected oil bill alone in 1990, according to the Institute of Energy Economics, could be Y45,4000bn ($207bn) if Japan keeps to its oil import target of 6.3m barrels a day approved at the Tokyo Energy Summit of last year.

The contributions of the three main ventures into alternate energy will only make about a 5 per cent contribution to total energy requirements by 1990. Yet this bite represents the equivalent of 33.3m kilolitres of oil a year: 21.4m from converted coal, 5.4m from geothermal power and 6.5m from solar energy.

While holding oil imports steady from 1985 onwards, the main burden of oil replacement through the 1990s will fall on the conventional systems: nuclear power, a revival of coal-fired or liquid natural gas, thermal power and, to a smaller degree, hydro-electric power.

Supervising the research and development of new energy is the Sunshine Project of the Ministry for International Trade and Industry. The project takes its three energy candidates through their experimental paces and then attracts private funds to nudge viable systems gradually into commercial usage.

Japan has been slow off the mark in the field of coal liquefaction. This may be due to a lack of overall policy on its development.

Several Japanese firms are involved in liquefaction projects abroad, which may have restrained plans to push ahead domestically in the field. Rival Japanese companies are developing oil from brown coal in Australia, and Japan along West Germany and the U.S. is withstudying liquefaction development in the SRC-II project in the U.S.

There is one big advantage in working on liquefaction projects abroad in the slightly whimsical view of one economist; it frees more OPEC oil for Japan.

After a critical self-assessment last last year the Sunshine Project launched its "accelerated promotion strategy," which winnowed out the three best potential energy sources and at the same time put maximum two ways of coal liquefacation: Y1,680bn is to be spent over the next ten years.

Centred

Economists in Japan reckon that liquified coal will become economical when oil prices have risen to about $50 a barrel. Research has also shown that turning coal into oil as opposed to gas has the best future. Development is now centred on two ways of coal liquifaction: direct and by solvent extraction.

Both systems mix powdered coal with heavy oil in a reactor under high temperature and high hydrogen pressure to extract oil. A test plant in Nagasaki can produce oil from one tonne of coal a day and two other plants are being built as pilot projects.

The islands of Japan are volcanic and beneath the surface are thought to be sufficient reserves of geothermal energy to satisfy four times the present energy demand.

But finding the right spot to tap this energy and finding the right system has proved difficult. Six geothermal power stations are presently in operation with output of about 200 MW.

Development is concentrated on using the reservoirs of hot water and tapping the thermal energy of volcanoes and hot dry rocks. One project would pump water down through hot rocks, using the returning steam to power a generator.

Making use of the volcanic strength beneath Japan is not only difficult—it is dangerous. It involves high pressures, high temperatures, corrosive chemicals and noxious gases. That said, there are many beneficial spin-offs once this power is harnessed. Hot geothermal water, for example, can be used to heat greenhouses, swimming pools and apartment blocks.

Sun power for the home looks as though it may become as successful as the current fast food craze which is sweeping Japan. Solar panels for water heating are selling as fast as they are made. One company, Chofu Seisaku Sho, turns out 26,000 panels a month and sales revenue rose from Y700m in 1978 to an estimated Y15bn last year.

The Sunshine Project wants to build the integrated solar house, where the sun not only heats the water but also heats the house and runs the cooling system. The sun would also warm up high-efficiency storage heaters to give out heat on rainy days.

Generating electricity from the sun works two ways: first by concentrating the sun's rays to heat water, turning it to steam to turn a power generator, and secondly, sunshine can be converted directly into electrical current.

In a solar thermal station of the first type a field of mirrors surrounds a tower and the sun's rays are bounced back to the top of the tower to a heat collector.

The individual mirrors pivot on their stands to track the sun during daylight.

The other way to capture sun power has been through solar cells—photovoltaic generation. Sunlight strikes two types of semi-conductors in a cell to create electricity. The cells are expensive and the brunt of research is currently aimed at eventual mass production of cheap solar cells. A new way has been developed of forming a silicone ribbon for the cells which reduces production costs to a fraction.

Other technological breakthroughs should bring this form of power generation on stream well before solar thermal power but neither system is likely to contribute much before the 1990s.

Itching

Other off-beat energy sources are, in general, confined to laboratories. There are doubtless scientists itching to proceed with the production of oceanic thermal energy.

One day this would launch a giant needle-shaped platform into the sea to float vertically. Power would be generated through the difference in temperature between the water coming into the deep end of the needle and the warmer water near the top.

One day too hydrogen may be developed as a source of Japan's energy. Hydrogen is efficient and clean but requires energy to produce it in the first place.

Behind all the search for alternative energy and the hopes to reduce the dependence on oil is Japan's greatest power base—its technical capacity and adaptability. Within the sprawling electronics industries and the large users of energy within industry are both the know-how and the facilities to react to mounting energy costs and the markets in new sources of power.

The move towards alternative energy is slow getting off the mark and modest in outlook in Japan. The continuing rise in imported conventional fuels is likely to quicken the tempo and broaden the outlook.

Emphasis

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station and local interests (such as fisherman's lobbies) who oppose having it on their territory.

Some advocates of nuclear power have proposed a sweetening of the pill for local residents by introducing a system under which communities located close to nuclear power stations would be given a discount on the normal electricity tariff. This idea, borrowed from France, has some serious snags, however, so far as Japan is concerned.

One problem is that existing legislation requires that electricity tariffs should be uniform throughout Japan. A second is that many nuclear power stations are located outside the franchise area of the utility companies which operate them. Tokyo Electric Power Company, for example, has located its nuclear power stations mainly in the northern part of Honshu island where local power requirements are met by another company which operates only conventional power stations.

The task of "selling" nuclear power to a reluctant nation by means of financial incentives or improved safety precautions is one of the main challenges facing the Japanese Government in the nuclear field. A second challenge is to guarantee the industry's long-term viability by developing new types of reactors and filling gaps in the nuclear fuel cycle.

All but one of Japan's 21 reactors are at present the American light-water type whose uranium consumption is relatively heavy—not to speak of disposal problems created by spent fuel. Japan recognises the need to move on from light water reactors to fast-breeder reactors perhaps via the interim stage of an Advanced Thermal Reactor (ATR) which would burn both uranium and plutonium. The cost of developing original Japanese technology in these areas, however, is extremely high and the fast breeder reactor, in particular, poses a set of delicate problems in international relations—given American opposition to its development.

The most that can be said about Japan's reactor programme today is that it is being pushed cautiously forward while a careful watch is kept on possible shifts in U.S. policy. A crucial decision, due to be taken before the end of 1980, will be whether to proceed with a programme for the development of a Japanese ATR which has already cost around Y120bn and which is now ready to move forward from the phase of operating a prototype reactor to that of building a "demonstration" model (one-third commercial size). Japan has achieved good technical results from the pilot ATR (known as Fugen) but doubts exist about the length of time for which ATRs [illegible] be useful before the coming of age of the fast-breeder.

In the area of nuclear fuel cycle development Japan's most pressing problem is to provide itself with the capacity to reprocess its own fuel from 1990 onwards, when existing reprocessing contracts with France and the UK will have come to an end. The Government has so far constructed a pilot processing plant with a capacity of 200 tonnes of fuel per year but a much larger plant, able to handle up to 1,200 tonnes, would probably be needed to deal with Japan's requirements during the 1980s.

A private company, the Japan Nuclear Fuel Services Co., has been formed to build such a plant (with the bulk of equity held by Japan's nine electricity generating utilities). The financing of the venture, however, has yet to be discussed in any detail and doubts persist about the attitude of the U.S.

Under its present bilateral agreement with Washington Japan is obliged to seek American approval for any plans to reprocess nuclear fuel burned in light water reactors if the fuel was originally enriched by the U.S. (a condition which applies to about 90 per cent of the fuel used in Japan). American attitudes to the proliferation of reprocessing activities have been negative to say the least under the Carter Administration and there is a risk—if only a small one—that the project could be blocked by Washington.

Because the nuclear fuel cycle in Japan is not yet anywhere near completion and because of unresolved doubts in other areas (such as the eventual cost of demolishing existing nuclear reactors) there is no certainty that nuclear power will be as cheap throughout the 1980s as it is today. Nuclear power stations should, however, continue to cost less to operate than conventional oil-powered stations, and far less if the cost of fuel alone is considered.

Because of this and the sheer impetus built up by the massive research and development expenditure which has already been undertaken, Japan seems certain to press ahead with its nuclear programme. Its current position as a "junior partner" to the U.S. in the field of nuclear power would seem likely to change very substantially by the end of the decade as nuclear reactors based on indigenous Japanese technology replace the U.S. current generation of light water reactors.

As a force in world markets, the Japanese nuclear industry has yet to make itself felt—exports of components in 1978 totalled a mere Y14bn and no complete nuclear "systems" have yet been sold abroad. In this field too, however, the industry probably has a considerable future.

High technology as driving force

INDUSTRIAL STRUCTURE

AYAKO DOI

"THE INDUSTRIAL slogan of post-war Japan was: Catch up and overtake the industrial West. Today we can say that we have caught up on almost all fronts and overtaken in some areas. This means, unfortunately, that we no longer have a model to look to." So says the official who edited the "Vision of Japan's industry in the 1980s" published by the Ministry of International Trade and Industry (MITI) last April. The "Vision" will hopefully offer a new national goal of the kind the Japanese have been used to having since the start of the nation's modernisation.

The concept put forward in the MITI vision is that of a "technology-based nation." Japan, according to MITI, should become not only a highly efficient manufacturing centre but also a sophisticated laboratory of new and original technologies. "The period when Japan made progress by applying and improving existing ideas has already come to an end," the book argues. "What comes next should be a period of creativity and original initiative."

Realisation

MITI claims that the idea of using high technology as the propelling force behind the Japanese economy is widely accepted throughout the public and private sectors. Behind this consensus lies the realisation that the oil supply situation will not improve and may worsen during the next few years. Japan learned from the first oil crisis in 1973 that it must acquire an energy-efficient, high value-added industrial structure. MITI concludes from this that in future Japan should concentrate on using its only natural resource — brainpower.

To cope with rising prices and an increasing scarcity of oil, Japanese industries have made significant improvements in energy conservations since the first oil crisis. Between 1973 and 1977 industrial energy consumption per unit of value added was reduced by 30 per cent. Savings were particularly great in the steel industry, which tried hard to switch its energy sources from oil to coal as well as to reduce total consumption. Last year the industry consumed less than half as much oil as in 1973.

According to a survey of long-term energy supply and demand prospects made public last year by the Agency of Natural Resources and Energy (a MITI offshoot) Japan should achieve a 12 per cent saving in energy by 1985 and a 15 per cent saving by 1990. With the present enthusiasm for energy conservation in all sectors of the economy it appears that the goal might even be reached without any sweeping changes in industrial structure.

"If energy were the only problem," says Mr. Takanori Tanabe, a senior industry research analyst at Nomura Research Institute, "we would have no need to go through structural changes." However, structural change has been occurring in Japanese industry independently of Government targets or predictions. A continuous process of change can be traced back to the pre-war period when textiles were the locomotive of the national economy.

Clothing and textiles appear high on the list of Japan's exports until the early 1960s. As the steel industry recovered from wartime devastation the Government began to promote a wide range of steel-using industries such as shipbuilding, chemicals, and motor manufacturing. Steel itself held its position as the largest Japanese export item until it was displaced by cars last year.

Next after cars and steel will come semi-conductors — or at least semi-conductor-based products—in the opinion of many analysts. "The silicon age is the name I would give the period we are now entering," says Mr. Tanabe. "It will follow the 'silk' age and the steel age in the annals of Japanese industrial development."

Semiconductors, represented by ICs and LSIs, do indeed seem to be at the core of MITI's "technology-based nation." Together with other high technology industries such as new materials, life science and alternative energy sources, the semiconductor industry will "spur further technological development and provide the basis for economic progress" the vision predicts.

Even before MITI published its Vision the Government and the electronics industry had invested Y70bn ($320m) in developing VLSIs whose technology, many observers believe has now passed that of the U.S.

"The present friction between Japan and the U.S. regarding the computer and semiconductor industries," says Mr. Yuji Masuda of Hosei University in his book "High Technology Industry," "is an inevitable result of the shift in the Japanese economy towards higher technology industries founded upon such traditional heavy industries as steel, automobiles and electrical appliances."

Research

Development of new technologies involves, however, high risks and large investments. According to the Agency of Science and Technology, Japan spends only 1.7 per cent of its GNP on research and development, compared with 2 per cent for the UK and West Germany, 2.4 per cent for the U.S. MITI hopes to raise the ratio to 2.5 per cent by 1985 and to 3 per cent by the end of the decade.

For a start it has announced a plan to invest Y17bn ($77m) over the next eight years for the development of fine ceramics, the material expected to replace metals in various products. The Government also wants to spend Y2,900bn ($130bn) in ten years on the development and commercialisation of alternative energies, including Y147m on basic research and development.

Although the increase in Japan's development expenditure may prove to be remarkable the amounts will still be small compared, for example, the $20bn the U.S. plans to spend in ten years on the development of new energies. The absence of a significant defence industry, in the view of some members of the business community, is a grave disadvantage in this respect. "Despite all the talk about technology there is a limit to what we can develop with the amounts of money that will be available," say Mr. Masao Kitahara, an economist at the Long-Term Credit Bank of Japan.

Others, however, are more optimistic. "Technological development is not only a function of money" says a Nomura analyst who also point out that R and D spending by the private sector is proportionately much higher in Japan than in the U.S. Fujitsu and Nippon Electric spend 6.4 per cent and 5.1 per cent respectively of their sales income on R and R compared with 6 per cent for IBM, and 4.4 per cent for Texas Instruments.

Toyota's R and D expenditure has been running at 3.7 per cent of sales while General Motors spends only 2.6 per cent. Overall, 66 per cent of Japan's R and D spending is accounted for by corporations while in most other countries governments pick up more than half the bill.

Given the limits on spending some observers argue that Japan's contribution to improving the world energy situation should be in the field of energy conservation rather than in the more costly development of completely new energy sources. "Our knowhow in manufacturing processes is far superior to that of other countries," says a Nomura researcher. He cites industrial robots as the most promising product of the 1980s with the present Y36bn a year a year market set to grow at a speed of about 30 per cent per year for the coming decade.

Superior

Another important trend in the development of Japanese industry has been the emergence of the services sector. The contribution of services to Gross Domestic Product (GDP) increased from 49 per cent in 1970 to 58 per cent in 1977 while the share of the manufacturing sector fell from 44 to 37 per cent (according to MITI). The service sector employs 55 per per cent of the working population today compared with 47 per cent ten years ago. Japan, like other industrial countries has thus become a service economy following the American pattern (where 70 per cent of GDP is accounted for by service industries).

Structural change cannot alter the fact that Japan has been, and always will be, an export-orientated economy. "Exports are the only way we can feed ourselves," says Mr. Hroshi Takechi, director in charge of research at the Long-term Credit Bank of Japan. He predicts in his recent book on industrial structure that Japan's exports will be led by electronics, information and communication systems, energy saving devices and specialised materials. "Traditional" items such as cars and optical goods, however, will continue to thrive thanks to the higher degree of sophistication that will be made possible by electronics.

Nomura Research Institute's Mr. Tanabe is, on the other hand, concerned that too much emphasis may be placed on technology. "I doubt whether we can have healthy manufacturing industries without healthy basic industries such as steel," he says. The first half of the 1980s, according to this view, may be a critical period for the Japanese economy in which the managers of basic industries will make or fail to make investments in renovating their production capacities. We will be able to tell during this period whether or not Japan is destined to follow the path of the U.S. steel industry in the 1960s, says Nomura.

Considering that Japan is gradually becoming an "aged society" — 11 per cent of the population will be over 65 years old in 1990, a proportion rising to 15 per cent in the year 2000 — the 1980s may also be the period which will determine whether the nation will be able to accumulate enough resources to support a comfortable old age.

Fine record of achievement in heat conservation

STEEL

MARK MEREDITH

PRODUCE A tonne of steel these days, even in Japan's most modern integrated steel mills, and half the energy used is lost. The work of coal, electricity and oil dissipates in steam or unreclaimed heat from furnaces and hot metal.

As the single largest industrial user of energy in Japan, accounting for about 15 per cent of energy demand, steel was an obvious candidate for conservation. And from the steel industry have come some of the greatest achievements in conservation. Japanese steel plants today require much less energy than their main Western competitors, only two-thirds as much as British works, for example. The industry has also managed to cut back its energy consumption since 1974 by nearly 10 per cent.

Examining this industry through its use of energy helps explain the comparative good health of steel in Japan at a time of reduced international demand and excess production capacity.

In June the five steel giants —Nippon, Nippon Kokan, Sumitomo Metals, Kawasaki and Kobe Steel—announced profit increases over the previous year of between 87 and 187 per cent. What really puts the figures in perspective is the fact that the industry made this kind of money while working at something below 80 per cent capacity.

A successful increase in steel prices, the effect on exports of a depreciation in the yen and recovering domestic demand all helped. But so too did the capital investment in energy saving and improved production techniques — Y4,600bn between 1973 and 1977—which has started to pay off.

Motivation

These were investments which put Japanese steel technologically far ahead of its international competition.

World capacity in 1977 was calculated at between 80m and 90m tonnes a year, while actual production reached 692m. Despite the rising cost of energy there was little motivation for other steel producers to make the investments in energy saving and new production. This has left Japan in a strong position to weather the recession, compete effectively with producers among the newly industrialised nations, meet demand for new types of steel and, above all, save on its fuel bills.

Japan is the world's third largest producer of steel after the Soviet Union (150m tonnes a year), and the U.S. (123m), with an annual output of 111m tonnes. West Germany ranks fourth with 46m tonnes.

Taking a closer look, the checklist for an energy conscious steel industry might look something like this:—

- Its efficient use of coal.
- Its recovery of waste heat and gas
- The amount of steel produced by continuous casting, the most fuel-efficient method
- Its yield or ability to make maximum use of production facilities.

Japan's steelworks import 90 per cent of their coking coal, mostly under long-term supply agreements with Australia, the U.S. and Canada. The revival of interest in coal, especially steaming coal, as an alternative to oil-fired power has pushed up coal prices generally and spurred the drive for greater efficiency in the use of coal in industry.

To ease import bills, the steel industry has moved effectively to make the most out of the coking coal used in the blast furnace to create pig iron. Through improved monitoring and controls, the Japanese ratio of coke to a tonne of iron has been pared down to below 430 kg (compared with 602 in Britain, 597 in the U.S. and 546 in the Soviet Union).

Some plants have started to move away from the use of the crude oil which is injected into the blast furnace by replacing it with powdered coke. This has only marginally increased the amount of coke used and brought oil consumption down from 15m kilolitres in 1973 to 9m in 1979.

Energy checkpoint two is the extent that waste heat and gas are recovered. One system uses the pressure of gas produced in the blast furnace to generate electricity at a nearby turbine. Twenty-two of these so-called top gas pressure units have been fitted to furnaces in Japan. The power from the giant blast furnaces at Nippon Steel's vast Kimitsu works near Tokyo is sufficient to supply all the electricity needs of the plant and as much again to feed into the local municipal electricity supply.

Recycles gas

Both the Nippon and Kawasaki works also use a method of recovering gas from the oxygen furnaces used to make steel. This OG method recycles the gas to burn in another furnace at the start of the hot strip mill where slabs of crude steel are formed into shapes. Gas recovery in 1978 was worth about 12m kilolitres of oil.

Two sub-points on the list for energy saving would be the use of dry quenching in ironmaking to allow the recovery of steam for heating purposes. Three such units are in operation in Japanese works. The other is the current study of ways to recover heat from slag.

Next on the checklist is the extent of continuous casting, one of the yardsticks of a modern steelworks. The thinking behind this German invention is to combine all the procedures of making crude steel into one operation to avoid reheating and recasting before the metal's arrival at the mills to be shaped. Under the traditional ingot system molten steel is poured from the blast furnace into ingot moulds which must be reheated to form slabs.

In energy terms, continuous casting uses up to two thirds less fuel than the primary mill ingot method. At Nippon's Kimitsu works about 15 men backed by computers and an array of television monitors run the continuous casting operation, guiding a sheet of molten steel poured vertically from the furnace on to a roller bed which curves to the horizontal leading the steel to a mould to be shaped into a slab.

In 1973 only about 20 of the steelworks were equipped with continuous casting; now the ratio is about 50 per cent and may reach 70 per cent in 1982. This compares with 38 per cent in West Germany, 36 per cent in South Korea, 15.5 per cent in Britain and 14.2 per cent in the U.S.

The final point on the energy checklist, yield, should be marked in red. Yield shows efficiency of crude steel production making maximum use of plant facilities in creating finished steel products. For example, crude steel production between 1970 and 1978 in Japan increased 11 per cent while the amount of finished products increased 22 per cent. More products were being made out of crude steel, reflecting more effective crude steel production and less waste. If the yield during this period had not risen seven per cent, another 5m tonnes of crude steel would have had to be produced to get the same amount of finished products.

Kawasaki managers, looking ahead, point out that the price of oil will in effect have to in-

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Futuristic solutions will save energy on the farm

AGRICULTURE

MARK MEREDITH

Inside the research laboratories of Hitachi, where work is proceeding on the development of high speed growing of vegetables

THE ENERGY crisis has made Japan the home of the high-speed lettuce. Outside Tokyo a full grown 200-gramme lettuce has been produced in eight days instead of the normal one and a half months. While its nutritional value has yet to be fully analysed, the lettuce tastes better than the slightly tired variety trucked in long distances from the farms, according to Dr. Masamoto Takatsuji. Six years ago he was pulled off his research on lasers to work in the well-guarded laboratories of Hitachi, the electronics giant, on the development of high density urban gardening. There, on the outskirts of Tokyo, sun, soil, farmer and most of the expensive marketing operations were being by-passed to create truly cost-effective vegetables.

Behind the stainless steel doors of a laboratory cabinet, basking in the light of fluorescent strip lighting, absorbing three times its normal dose of carbon dioxide and supervised by microprocessors, a large test green pepper seemed about to set a personal best growth time.

Avoided

While the plant consumed energy in the form of constant lighting the other food production costs were avoided, giving the plant, even at this experimental stage, a cost value already at a par with the marketplace.

The shortage of energy in Japan has not had anything like the impact on agriculture as it has on industries such as steel and power. But the crisis has spawned an extensive and enthusiastic array of boffins ranging from Dr. Takatsuji to the local farmer reporting a viable system for heating his barn on the methane gas produced from manure.

Industry too has been quick to adapt to higher energy costs in farming.

Hitachi's researchers foresee the day, though possibly not for five or ten years time, and possibly not even in Japan, when vegetable factories will be built in industrialised areas. Vast endless belts will nudge vegetables through their abbreviated gestation. The plants would be grown hydroponically — without soil and suspended in water laced with a dose of fertiliser. As the plants only require the blues and reds of the light spectrum to grow and these are found in fluorescent lights, the sun would be redundant. A mass spectrometer will measure the light and temperature required for optimum growth and instruct a computer to memorise the treatment for use in mass production.

Mr. Yoshisuke Kishida dabbles in celestial agronomy, designing farms for future space stations. He also is president of Shin - Norinsha Company which publishes periodicals on farm mechanisation. He is another exponent of city gardening to by-pass marketing and fully expects the average home of the future to be equipped with an indoor conservatory growing a rice crop in 90 days on one shelf, with tomatoes, lettuce and other vegetables on other shelves—all computer-guided to meet regular demand.

The Japanese agricultural sector consumed a relatively minute 46m kilolitres of oil in 1979—most of it used on mechanised equipment. But conservation studies were set up by both the powerful national farming co-operative and the Ministry of Agriculture, which launched a "green energy" programme. The response was impressive.

Professor Sakuzo Takeda came up with his plan for extracting oil from eucalyptus tree leaves. A Suzuki motorbike was even successfully run on the fuel. Planting the forests was another problem as land is scarce but the suggestions, designs and inventions came thick and fast.

All the energy - saving measures, however, will do nothing to solve the fundamental problem of Japan's agriculture. Farmers constitute less than 10 per cent of the working population and contribute a declining part of the net national product—about 4.5 per cent in 1976. Their farms are small, averaging about 1.2 hectares (compared with an average 64 hectares in Britain and 157 in the U.S.) and farming land covers only about 15 per cent of the country.

But the ruling Liberal Democratic Party has traditionally needed the farming vote and the farmers, realising their political clout, have kept prices artificially high for their main commodity, rice, as well as for other produce such as grain and beef. Rice production, accounting for about a third of the farm produce, is protected by huge subsidies which pay the farmer approximately $1,300 a tonne when the average world price is $200. This has led to surpluses estimated last year at 72m tonnes.

Despite a self-sufficiency of about 70 per cent in the products it grows, Japan is still the world's largest net importer of agricultural products and is likely to become even more dependant on imports in future.

Efforts to diversify crops away from rice have met with little success and hopes of some degree of self-sufficiency in other crops seem remote.

The U.S. grain embargo against the Soviet Union following the invasion of Afghanistan struck a sensitive nerve in Japan The Ministry of Agriculture recently announced an emergency contingency cultivation plan to meet a crisis in which half the grain imports were cut off. Were food imports to be halved, according to the Ministry, the totally planted acreage would need to be increased by 30 per cent, or 7.5m hectares.

Unwilling

The small farm units have effectively prevented more efficient farm management and sky-rocketing land prices have meant that farmers are unwilling to sell their plots. The farm population meanwhile declines as many farmers take up jobs in industry and tend their fields at weekends.

The surplus rice, says Mr. Kishida, the publisher-cum-space farmer, cannot yet be profitably converted in fuel — which would be a convenient solution. The advances already made in the production of rice wine, or sake, do not automatically mean four-star rice fuel can follow. Efforts are being made, however, to encourage rice consumption through inventions like rice champagne or rice whisky.

"One solution," said Mr. Kishida, and only half in jest, "is to convince the farmer to plant a large solar panel in his paddie instead of rice." University scientists in Japan report the development of a cheap photo-electric cell which could eventually mean the economic construction of a solar panel turning sunlight directly into electricity.

Japanese industry has adapted to the smallness of its farms and at the same time has captured much of world demand for small tractors under 40 hp. The industry also adapted quickly to the need to conserve fuel. Yanmar Company came up with a 5.5 hp, two-wheeled tractor powered by diesel instead of the traditional petrol engine and consuming approximately half as much fuel. Kubota, the first company to get into the small tractor business, has also produced a diesel-powered, four-wheel, nine hp tractor.

Shikawajima Shibaura adapted microprocessors to its tractor transmissions to provide maximum fuel efficiency relative to load and gear.

Microprocessors also allowed Kaneko to increase the economy of grain and rice driers. A farmer can now select the moisture content he wants and not consume excess electricity and paraffin. The firm even changed the pitch of the fan to give better results.

The farming industry seems to have paid more attention to energy storage than other sectors. Farmers writing into the agricultural Press report they can overcome frost damage by using soil banks with the greenhouses. The greenhouses are double-glazed with plastic sheeting and the soil beneath the house is planted with open-ended pipes to allow the warm air of the day to circulate and heat the soil. The soil then keeps much of its heat during the night.

A cheaper form of heat storage came from another farmer who built a mound of loose stones in his greenhouse. The warm air of the day inside the greenhouse is circulated through the rocks by a small fan to form a sort of storage heater.

Achievement

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crease a good deal more to encourage more radical capital spending on energy conservation systems in steelmaking.

Of the Y648bn of capital investment in the industry last year, 52.2 per cent was related to energy conservation and two or three per cent of this spent directly on energy saving.

Energy-orientated investments have meant that Japanese steel is better equipped to ride out the oil crisis and slow international demand and to be ready to meet demand recovery.

Greater yield through energy-saving techniques like continuous casting have also meant that the finishing processes such as hot rolling, cold rolling, flange beam making, plate, sheet and pipe manufacturing can work at near capacity.

Japan is in the midst of structural change, moving the emphasis away from the heavy industries which led the economy out of the destruction of the war. The accent is moving towards service industries and new applications of electronics. But steelmakers still see a strong role for steel.

Their principal source of encouragement comes from the domestic economy. Shipbuilding is showing signs of moving out of the dumps, but more important is the growing demand for new types of steel.

Steel, for example, accounts for between 75 and 80 per cent of the weight of a car. The challenge to steel manufacturers now it to produce lighter high-strength steels for the motor industry to help produce more fuel-efficient vehicles. The demand is also there for more corrosion-resistant steels.

The rails for faster trains and the pipes to carry oil at great depths underwater or through Arctic conditions create fresh demands for improved quality steel.

Mr. Tsutomo Kono, general manager of Nippon Steel's corporate and economic research department, also feels the demand will be for cheaper steels. This would correspond to the slow rates of growth and reduced expenditure to be expected among industrialised countries over the next few years.

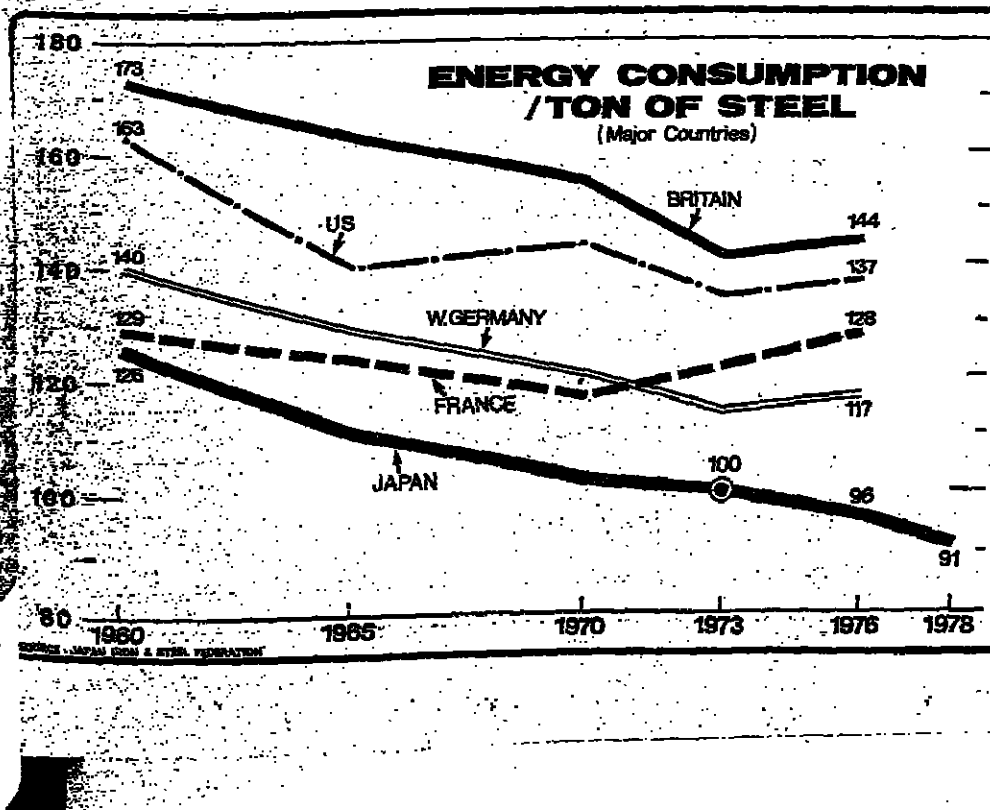
It is clear that Japan hopes to dominate the growing demand for new high-strength steels. The assumption among its senior managers seems to be that Western European and American steel producers will have problems enough preventing further losses, let alone embarking on new product lines or extensive capital investment in improved technology.

At the same time the Japanese hope that the growing competition in steel from the newly industrialised nations such as South Korea or Taiwan will be restricted to traditional lines and not enter the new high-strength market.

Intrinsic to the survival and continued likely dominance of the Japanese steel industry will be its own self-regulatory qualities. "Orderly marketing" is a term which grew out of the steel industry to describe the process of consensus between the steel producers as to their production level, markets and prices.

The vehicle for this consensus has been the omnipresent Ministry for International Trade and Industry. The guiding hand to steel during the lean years after the first oil crisis, the Ministry is less influential now about marketing and production levels but issues quarterly forecasts of domestic and export demand and presents industry with an idea for the right level of production.

This "We're-all-in-it-together" approach to the fate of the industry has allowed Japanese steelmakers to fine-tune production to meet recession and eventual demand revival. They have worked out ways to run their plants at below capacity to reduce cost and still make money. They have made huge savings through energy conservation and they have allowed manning levels to subside through natural wastage.



Major projects are all offshore

PETROCHEMICALS

JOHN FUJII

JAPAN HAS three major offshore petrochemical projects underway but surprisingly enough none of them is designed to provide more supplies for the domestic markets.

The three offshore projects are the multi-billion dollar petrochemical complex the Japanese are building at Bandar Kohmeini, Iran; the joint venture with Singapore to build a petrochemical complex on Merbau Island off Singapore; and the huge petrochemical project planned for Al Jubayl in Saudi Arabia.

The Japanese are also interested in a multi-nation petrochemical project at Prudhoe Bay, Alaska.

The oldest overseas project is the Iran complex, which was proposed back in 1968 as part of the industrial plant export programme. Construction started in 1971 and is believed to be 85 per cent complete, but has been untouched for the past 16 months because of the political unheaval in Iran. Since then the Iran Government has been pushing the Japanese to resume the project but disagreement about feedstock and financing have further delayed the project.

Even if the project is resumed in the near future there is still the problem with the condition of the equipment, which has been lying idle in the desert, and the question of who is to operate it after completion. So even if all remaining issues are ironed out, it is not likely to go onstream, if ever, before three or four years. The Iran Chemical Development Company is currently discussing the issues with the Iran Government.

Meanwhile the Singapore project seems closer to reality. Ground-breaking ceremonies were held on July 17 for the ethylene centre. All the infrastructure has been completed, so the way seems smooth for the Petrochemical Corporation of Singapore, a 50-50 venture between the Singapore Government and the Japan-Singapore Petrochemical Corporation representing the Japanese investors. The Japanese Government Overseas Economic Co-operation Fund (OECF) is putting up 30 per cent and a Japanese investment group of 28 companies headed by Sumitomo Chemical Company is putting up 70 per cent of the Japanese half of the S$16m, while the Singapore Government is putting up 47.5 per cent and the Singapore Development Bank 2.5 per cent of Singapore's share.

A Sumitomo Chemical spokesman said that construction is scheduled to be completed by the summer of 1982 and that the complex is to go onstream in the autumn of the same year. Output is expected to be 300,000 tonnes/year of ethylene.

Additional downstream companies are to be established such as the Polyolefin Company (Singapore), with 120,000 tonnes/year of high-density polyethlene and 100,000 tonnes/year of polypropyelene; the Philips Petroleum Singapore Chemicals with 80,000 tonnes/year of low-density polyethlene, while another company, net not established, is to produce 80,000 tonnes/year of ethylene oxide *and 100,000 tonnes of ethylene* glycol.

The Japanese Government has decided that the Singapore petrochemical complex is to be a national project since 28 companies in addition to the OECF are putting up the funds.

National

The third offshore project is the Saudi Arabia petrochemical complex. This also is a national project and involves 54 Japanese companies headed by the Mitsubishi group.

An agreement was signed recently by the Saudi Petrochemical Development Company, the Japanese investment consortium, and the Saudi Basic Industries Corporation (SABIC) for a feasibility study due for completion in March 1981. Only after the study is completed are the final details to be worked out for the project.

If the study shows that the Al Jubayl project is commercially feasible, construction of an ethylene centre might be started sometime in 1981.

The proposed project is to use gas from the offshore fields near Al Jubayl to produce 450,000 tonnes/year of ethylene, 250,000 tonnes/year of high-density polyethylene, 80,000 tonnes/year of low-density polyethylene and 150,000 tonnes/year of ethylene glycol. Some of the production will be shipped to Japan but the remainder will go to other markets.

This project, initially for a 300,000 tonnes/year ethylene complex, was proposed by Saudi Arabia back in 1970. But it was put on the back burner *after the 1973 oil crisis, which* sharply increased building costs.

The proposal was revived in 1977 as a national project to indicate economic co-operation with Saudi Arabia to ensure a stable petroleum supply.

The Al Jubayl project was further delayed when Saudi Arabia upped the scope of the complex to 450,000 tonnes/year of ethylene.

As can be seen, these three projects were not initially planned as part of the Japanese petrochemical industry. The projects in Iran and Saudi Arabia were designed to ensure a steady source of petroleum while the project in Singapore was part of Japan's economic assistance programme to the South East Asian nations.

Mr. G. R. Baker, president of Dow Chemical Japan, believes that Japan must go offshore with petrochemical projects. "It's to Japan's advantage to go offshore where energy costs are less, land costs are less and raw material is available," he explains.

Mr. Baker estimates that in Japan energy costs are at least 4.5 times those in the U.S., while land costs are 10 to 30 times more. Of course, imported raw material costs are high, compounded by rising shipping costs.

Asked why Japan could not buy directly from countries like the U.S. where costs are lower, Mr. Baker explains that additional capacity is not available for Japan.

Japan needs sources where supply is reliable, quality is consistent, pricing stable and inventory variable.

Mr. Fukashi Hori, chairman of Asahi-Down, a joint venture between Asahi Chemical of Japan and Dow Chemical of the U.S., *also feels that Japan* should build new petrochemical plants overseas. He notes that 80 per cent of the petrochemical costs are in raw materials and energy and only 20 per cent in fixed costs.

At present there is 6.2m tonnes/year capacity in Japan for ethylene, of which 10 per cent is non-operative because of outdated equipment.

A Japanese Ministry of International Trade and Industry survey showed that out of 12 major petrochemical products, seven were produced by plans over 10 years old. Only styrene monomer and isopropene rubber are made in relatively new plants. Oldest are styrene butadine rubber facilities (13 years), while acetaldeyne plants are 12 years old. Ethylene plants were found to be on an average of 9 years and 4 months. There are now 18 petrochemical combinates in Japan.

Ethylene production in 1979 was 4.7m tonnes, while in the first four months of 1980 they were 1.62m tonnes. Normal growth in demand is projected at 6 or 7 per cent, about the same as Japan's GNP, or roughly 300,000 tonnes annually.

The only major project for expansion in Japan is the proposed ethylene centre planned by Idemitsu Petrochemical in Chiba. Land is available for the project but it is expected to take several years before contruction actually starts because of local anti-pollution opposition.

There is an oversupply of ethylene products by 1.5 months at present, which could build up to 1.8 months' supply if the demand in the second half of the year continues to decline.

According to a Fuji Bank survey, domestic demand for petrochemical products, mainly synthetic resins and synthetic rubber, was favourable in fiscal 1979, thanks largely to the growth in production of electric home appliances and automobiles.

In addition, anticipation of higher prices prompted speculative demand. In the latter half of fiscal 1980, however, the repercussions of these speculative purchases may cause a downturn in demand for synthetic fibres.

Because of the growing self-sufficiency of Taiwan and South Korea, as well as the competitive prices of American products in Asia, exports declined in fiscal 1979. Imports, especially of raw materials for synthetic fibres, will continue to grow in fiscal 1980.

The price of naphtha, both domestic and imported, hovered around $300 per kilolitre. This is a big contrast to previous years, when the domestic price was about $30 higher than the international price to the exchange rate.

More and more of the Japanese companies are turning to fine chemicals as a means of increasing demand. Both at Asahi-Dow and at Sumitomo Chemical, spokesmen explained that demand for more value-added products in the agricultural and pharmaceutical fields is growing.

Sumitomo said that there was a brisk demand for aniline from the polyruethane industry, active demand for *BHT* (*anti-oxidant*) from the plastics and petroleum industries, while ethylene vinylacetate emulsion sold well for construction, adhesive and paint applications. Shipments of epoxy resins showed a noticeable increase, especially for cationic electrodeposition use by the automobile industry.

A number of downstream plants are going up. Sumitomo said that a 5,000 tonnes/year recorcinol plant is under construction using a pollution-free hydroperoxide process and is scheduled to go onstream this autumn. A plant for producing 1-amino-anthraquinine by a mercury-free process is also to be commissioned by the end of this year.

A Japanese research group, subsidised by government funds, is expected to start carbon monoxide development this fall. Research will centre on ethylene glycol, as a raw material for polyester fibres, ethanol, acetic acid and hydrocarbons.

The purpose is to obtain processing knowhow for production of ethylene glycol and other chemical prducts from carbon monoxide by fiscal 1986 at an estimated cost of $68m. The project is designed to reduce dependence of the chemical industry on petroleum and derivatives for chemicals.

Oil price aids U.S. sales

THE MOTOR INDUSTRY

AYAKO DOI

THERE HAS never been a time when Japanese cars were so popular all around the world. Japanese car exports in May reached 498,171 units, the highest level for a single month. In the U.S. one out of five cars sold on the market is now Japanese-made. In Europe, though the number is still small—89,702 in the nine EEC countries in May—the Japanese share is increasing rapidly. Sales in the Middle East jumped almost 80 per cent up from the corresponding month last year to 50,000, the majority of them to Saudi Arabia. The gain in South America was even more impressive—140 per cent for the area and 240 per cent in Chile.

Moreover, Japan has beaten the U.S. as the world's biggest car producer in the first six months of this year, producing 5.46m vehicles compared with 4.42m for the U.S. Toyota and Nissan count themselves among the top three car makers of the world along with General Motors, and they are likely to stay there for the whole of 1980.

What makes these figures not only impressive but also annoying is the depression in other car-producing countries, notably the U.S. The number of cars sold by the top four American manufacturers plunged 37 per cent from last year to the worst level in 20 years. Production in the third quarter (July-September) is expected to remain at the low level, leaving the already unemployed 320,000 workers still out of work. In Europe, Ford in West Germany experienced a 15 per cent loss in sales in the first four months of this year, while the market share of the Japanese imports doubled from last year to over 10 per cent. In the UK, 14 per cent of the market is taken by the Japanese, and the figure is up to 29 per cent in the Netherlands.

In the eyes of those whose markets are invaded, Japanese makers are expanding their sales at the cost of local industry. For the Japanese, however, what is happening is that their products are simply filling the demand that local manufacturers cannot supply.

The reason for the remarkable performance of Japanese vehicles, needless to say, is their fuel efficiency. According to the U.S. Environmental Protection Agency, of the 50 most fuel-efficient sub-compact models available in the U.S., 32 are Japanese. Although Volkeswagen's Rabit beats all other models with an amazing 42 mpg, the variety of products from which consumers can choose above 25 mpg is much greater with Japanese.

Focus

Japanese cars, which had steadily been penetrating the U.S. market since the late 1960s, became the focus of consumer attention after the oil crunch early last year. The shift of consumer preference towards smaller cars was accelerated by the acute increase in oil prices *last December. While the U.S.* manufacturers could not produce fast enough to catch up with the swelling demand, the Japanese had stocks in hand. As the recession in the U.S. pulled the total auto sales down, the Japanese share went up from 21 per cent last year to 23.4 per cent in May.

"The reason for our popularity is not only the fuel efficiency," says Mr. Takeo Arai, Nissan Motor Company's director in charge of public relations. "Our quality in general is superior to other products." His statement was confirmed in the recent report on auto situation prepared by the U.S. House of Representatives' sub-committee on trade (headed by Congressman Charles Vanik).

Affixed to the report were letters from American consumers praising the high quality of Japanes products ."I have owned four foreign cars over the years. They were gas savers and built like solid tanks . . . you could not find anything wrong with them," wrote one. "*The reliability*, performance, customer acceptance and overall quality of the Japanese import far exceeds that of the U.S.

CONTINUED ON NEXT PAGE

Business boosted by oil purchasing

TRADING COMPANIES

RICHARD HANSON

IF ONE adds up all the oil handled by Japan's big general trading companies, which transact more than half of all Japan's trade, the amount is only enough to place them in size somewhere between Gulf and Mobil among the oil majors. The trading companies themselves are quick to emphasise that their role in the energy trade is very different from that of the majors.

There is no doubt, however, that the big traders have emerged from the latest oil crisis as Japan's most important link with oil supplies. This fact alone has meant a tremendous boost in their business over the past year.

The energy crisis has in effect tended to accelerate a shift in the functions that the general traders perform within the Japanese economy (and more than ever before in trade not involving Japan directly). The most important post-war role of the trading company was to provide a window to the world for Japanese companies lacking the individual capacity to sell products in far-flung places, the trading companies, for a small fee, provided financing and important information networks.

Speculate

Their growth was spectacular throughout the 1960s and early 1970s, but as more and more of the successful Japanese companies, however, began to export on their own it became popular to speculate over whether the trading companies might eventually shrivel up and disappear.

That kind of speculation now seems to be part of a very dim past. The trading companies have discovered that size and organisational ability can be very useful in a world which increasingly depends on huge development projects to open up new supplies of energy and raw materials. The traders act as the hub of a wheel in these projects. They gather the "spokes" needed to get the job done, and are very skilled at finding markets for whatever is finally produced.

The fastest growing areas of trading company business are in fact in energy (the bulk of which involves importing oil to Japan), and the handling of trade outside of Japan (with oil and grain the two most important products). The shift into oil business has been spectacular over the past year.

What has happened is simply that Japan found it could no longer be assured of supplies through the majors. These companies had provided Japan with virtually all its oil in the 1950s and between 80-90 per cent at the time of the first oil crisis.

The disruption of world oil supplies caused by the revolution in Iran, however, forced the majors (in most cases) progressively to turn off the supply of oil to all but their own affiliates in Japan. The result initially was a mad scramble by the trading companies (and local oil companies) to buy oil elsewhere—i.e., either on the spot market or through longer term direct deals with the oil producing countries.

Despite problems with their contracts for Iranian oil the traders have succeeded handsomely in finding oil for Japan. At present the direct deals provide more than 40 per cent of Japan's oil imports (compared with only 20 per cent two years ago, and the 45 per cent share still imported from the majors). Since mid-April the amount has been cut by a pricing dispute (tied indirectly to the U.S. sanctions issue) with Iran. The companies hope to resume lifting of Iranian oil later this year. There are hints that the amount will be cut to less than half the 530,000 b/d of the original contracts signed in April 1979.

The sudden shift of oil trade to the trading houses was reflected clearly in the business results reported for the accounting year which ended in March. The top six traders each reported turnover was up more than 30 per cent over the previous year. Energy and chemical divisions showed the most spectacular jumps (up more than 70 per cent). Oil and gas sales thave doubled in importance for the companies.

Ironically, under Japanese law the trading companies are not permitted actually to import oil themselves. With the exception of Mitsubishi Corporation, a 1962 petroleum law limits the right to import oil to the oil companies operating in Japan. This technicality limits the traders in that they need guaranteed buyers in Japan before they can place orders with the oil producers. Some of the trading houses have equity shares in the oil refiners they supply.

Mr. Toshikuni Yahiro, president of Mitsui and Co. (whose profile appears elsewhere in this survey) believes that the oil business now is a major factor in determining the ranking of the big houses. He claims that Mitsui (the number two company) could overtake Mitsubishi but for the fact that the latter has the biggest share of the oil business. Energy and chemicals were 20 per cent of Mitsui's Y11.208bn sales last year, while thet same category accounted for 32.5 per cent of Mitsubishi's Y12.066bn.

Commission

The boom in oil business does not necessarily mean that the companies are raking in windfall profits. Traditionally the big traders operate on very small margings and commissions and rely on volume. In the case of oil, price increases boost the sales total, but the companies are paid a commission on the volume they handle (not the value). The commission is generally about U.S. 10 cents per barrel, a very small sum considering the risks of the oil business.

Partly because the trading companies had their images tarnished for alleged profiteering in the confusion which followed the 1973 oil crisis, the companies nowadays like to emphasise that their involvement in oil is more a question of "duty" rather than of self-interest. Procuring oil supplies (as in the case of natural gas, coal and other forms of energy) actually requires co-operation with the Government, which in some cases negotiates directly with producing countries for long-term contracts. In contracts negotiated by the companies themselves, such as with Iran, the Government keeps a sharp eye on the terms and conditions.

Finally, the trading companies have found themselves at the centre of development projects, in the "national interest," in countries which supply resources to Japan. They are not, however, very enthusiastic these days, particularly when the projects are in the Middle East. The revolution in Iran and the troubles it has brought for Mitsui's huge joint venture petrochemical plant at Bandar Khomeini, have made the companies nervous about other large investments in the Arab world.

Mitsui last year went so far as to bring the Japanese Government into its joint venture with Iran as part of its efforts to keep the project alive. Continuing the $3.3bn project is now at least indirectly tied to keeping Iran as a source of oil. (Mitsui originally agreed to build the complex as condition for winning an oil exploration concession in the early 1970s. The concession proved worthless.)

The next major project that the Japanese Government has promised to co-operate on is a $2bn petrochemical complex in Saudi Arabia, to be built by the Mitsubishi group. Progress has been very slow, having just reached the feasibility study stage after being first proposed in 1976. But it appears that Mitsubishi will have to go along with it if for no other reason that not doing so might anger the Saudis (who provide Japan with 30 per cent of its oil). The trading companies (and Japan generally) cannot afford to avoid such risks if they are to remain successful.

TURNOVER OF TOP SIX TRADING COMPANIES
(Year to March 31, 1980—Y bn)

	Total	% increas on year	Energy/ chemical related	% increase on year	Third Country business	% increase on year
Mitsubishi Corporation	12,308	36.6	3,922	76.1	765	56.2
Mitsui and Co.	11,208	34.1	2,920	73.6	1,110	68.1
C. Itoh and Co.	8,862	35.1	2,679	72.4	1,137	40.4
Marubeni	8,388	33.8	1,720	70.4	1,372	62.1
Sumitomo	7,600	29.9	1,934	74.5	524	83.1
Nisho-Iwai	5,769	38.1	1,429	126.1	639	49.9

Oil price

CONTINUED FROM PREVIOUS PAGE

version," said a rental-car agent. Another outraged consumer asked "Has anyone ever said 'Don't buy a Japanese or German auto made on Monday because the workers come in too hung over to work right'? The foreign workers take pride in their product!"

The report also mentioned an opinion survey of motor engineers conducted by an American trade magazine. Almost half of the engineers interviewed responded that the Japanese cars are the best in quality. They rated the Japanese products at the top not because of their superior technology, but on account of their better workmanship and better attention to fine detail both in design and on the assembly line.

The confidence of the Japanese makers in their products may explain their seeming composure in responding to the demands from auto managements and labour abroad for measures to restrict the Japanese imports. Although they do not officially talk about collaborating to restrain exports, which would violate the Japanese anti-trust law, observers agree that they are ready to make some sort of concession.

Toyota Sales Company's chairman, Mr. Seisi Kato, recently suggested that the company would accept bilateral trade regulations if such a thing could successfully be worked out between the U.S. and Japanese Governments. "I don't foresee the imposition of import quotas, given the strong support from consumers of imported products," says Nissan's Mr. Arai. "The most likely scenario," he continues, "seems to be an orderly market agreement, which eventually may force us to establish assembly plants in the U.S.—just like the colour TV industry."

At the base of such tolerance is an assumption that the Japanese cars will remain popular in the U.S. market, no matter how entry is restricted, until the American small-car production comes in full swing in the mid-1980s. "The Americans are just starting with fuel economy, while we have been concentrating on it since before the oil crunch," says Nissan's Mr. Arai. "It takes time to find the ideal balance between smallness of space and comfort, lightness of materials and solidity, and cleanness of exhaust and fuel-economy."

Automatic welders on the assembly line: the motor industry is proud of the quality of its products

To support his remark, the Vanik Report states: "The U.S. auto industry will probably contiue to lose much of the small car market to imported models until at least the 1983 model year starting in September, 1982. If gasoline prices continue to rise faster than the general inflation rate, American production levels will be inadequate until late 1983."

Drastic cut

The U.S. Department of Transportation estimates that American production of newly-designed fuel-efficient cars will go up from the present 1.8m units to 4m in 1982. The capacity is expected to reach 10m or 11m units by 1985, of which 6m will be produced by General Motors. Assuming the U.S. auto market stays at the present size of 10m units, with 60 to 65 per cent devoted to small cars, General Motors alone can provide all the small cars American consumers will need. Even if the share of small cars increases to 80 per cent of the market, imports will have to be reduced drastically to accommodate American products.

What then will happen to the Japanese industry? "Our sales will no doubt suffer considerably," concedes Nissan's Mr. Arai. Starting an assembly line in the U.S. is no solution, for, if the decision is made today to invest in the U.S., the first American-made products will not hit the market until two or three years later, only to collide with newly introduced, and probably cheaper, domestic models.

So far only Honda has announced its plans to build a passenger-car assembly facility in the U.S., starting operation in 1983. Obstacles are greater for Toyota and Nissan which, unlike Honda, have many different lines of products. Nissan's decision to assemble pick-up trucks in the U.S. is considered to be a response to the threatened lifting of import tarrifs on truck parts from 4 per cent to 25 per cent.

"Whatever the problems are at the moment," says an industry analyst at Nomura Research Institute, "this is only a semi-final." The final match, he believes, will be fought when the American industry is prepared to fight on equal basis with the Japanese for the subcompact market. "The American auto industry has made the same mistake that the steel industry made by not investing when it should have done," he argues. "But unlike the steel industry, which was hit by the Japanese to the point where it can no longer stand on its feet, the auto industry still has a reserve of strength."

While the Japanese makers are proud of their quality, they do not underestimate the technological potential of their American counterparts.

With their prices already higher than the U.S. products, the Japanese automakers will need something more than just superior workmanship to beat the Americans, especially if they are going to use American labour as well. They have tried front-wheel drive, lighter materials and a wider application of electronic devices. They are working on other new technologies such as radar cars or television camera automatic driving.

But none is striking enough to be called innovatory. The electric car may change the whole picture of the industry in the 1990s, but until then, the Japanese makers will have to defend themselves with the shield of "quality."

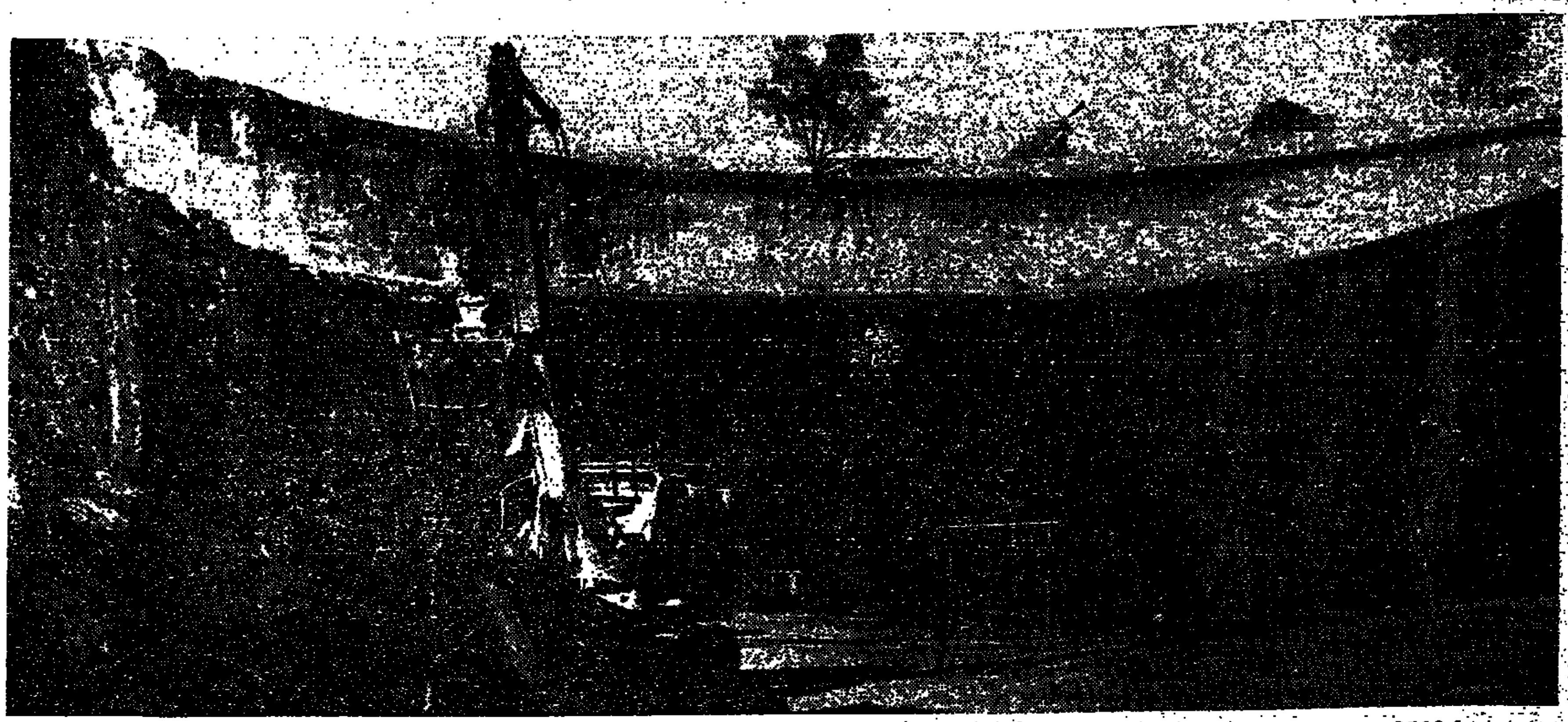
"What we should aim to do in the 1980s is to defend our present position," says Nissan's Mr. Arai. He, like other industry spokesmen, does not expect an increase in the U.S. market share above the present level. As for Europe, "We may go up to 10 per cent of the EEC market, but no more," he predicts. The 1980s for the Japanese auto industry may not be as smooth as the past decade. After all, once one reaches the top of the hill, one can only stay there or go down.

However, one should always look for new possibilities, and there is at least one, according to an American magazine—the super-fuel-efficient minicars. Moreover, they have already been made and sold all over Japan for the last few decades. Manufactured by Daihatsu, Suzuki and Fuji (Subaru), these Japanese versions of the Fiat 126 weigh less than 1,500 pounds and do more than 45 miles per gallon. Their top overseas markets are Chile (7,700 sold last year), Greece (1,109) and the Netherlands (472), but they cannot be sold in the U.S. because of safety requirements. Asked about the possibility of marketing minicars in the U.S., one company executive laughed and said, "We have never really thought about it."

Growing economic partnership

AUSTRALIA

HAMISH McDONALD, TOKYO CORRESPONDENT, SYDNEY MORNING HERALD



The Blair Athol open cut coalmine near Clermont in Central Queensland. The mine's main seam has a maximum thickness of 110 feet.

JAPAN'S SWITCH from oil into alternative fuels is triggering off big developments in mining, industry and trade for Australia, and seems certain to tighten the economic integration of the two Western Pacific nations.

To an extent that rather alarms Japanese business circles, availability of supply and transport economics dictate a heavy reliance on Australia for new energy imports, particularly in steaming coal.

For Australia, the Japanese buyers still remain the key customers who sign the bankable contracts that get big new projects started. This is despite diversification of the Australian resources trade in recent years, the result in large part of the emergence of new industries in South Korea, Taiwan, China and elsewhere in the Pacific.

The new Japanese thrust into Australia is taking the form of investment and orders for resources to be shipped to Japan, and in the relocation of energy-intensive industry such as aluminium.

The most spectacular single development will be the liquefied natural gas project (LNG) on the North-West Shelf, offshore from Dampier in Western Australia's Pilbara region.

Woodside Petroleum Pty. and its associates are now hammering out the fine detail of a contract with five Japanese power companies and three gas utilities for supply of over 6m tonnes a year of LNG from 1986.

The North-West Shelf partners were confident enough earlier this year to begin letting contracts for production facilities, despite some ruffled feathers among intending Japanese LNG purchasers about the Australian decision to strip petroleum gas from the product for separate sale.

The Industrial Bank of Japan was one of eight foreign banks to agree in June this year to a U.S.$1.3bn consortium loan for the first part of the development, which is expected to cost about $4.5bn all up.

The Australian Minister for Trade and Resources, Mr. Douglas Anthony, has put earnings from the project's LNG, condensate, and liquified petroleum gas at over $1.5bn a year (at November, 1979, prices) either from direct exports or petroleum import replacement.

Over a longer term Australian steaming coal exports to Japan will continue a series of leaps, forming a large part of the big expansion of Australian coal exports forecast in May this year by the International Energy Agency's World Coal Study.

This study saw Australia and the U.S. becoming the principal exporters of coal by the end of the century. Australian exports would grow from 38m tonnes of coal equivalent in 1978 to some 160m by the year 2000.

Coal is now the biggest item in Australia's export list, earning about U.S.$1.660bn in 1978-1979, or 10.7 per cent of total exports. Of this about 71 per cent or some $1.2bn went to Japan, mostly for steel production.

Japan is still formulating estimates of future steaming coal demand, but some rough figures are being used in Tokyo that give an idea of the way the trade could move.

The energy use targets issued by the Ministry of International Trade and Industry (MITI) last August give steaming coal import levels of 22m tonnes in 1985 and 53.5m in 1990, compared with last year's imports of about 1.45m.

It is still highly uncertain whether these targets will be met. The cement industry has led the initial push into steaming coal, and may take imports up to 5m tonnes or so this year but after the conversion from oil is completed in a year or two will not provide much growth beyond that.

Reluctantly

The power utilities are moving rather more reluctantly into coal, a fuel they had rather hoped was behind them. They point out that coal-fired power stations occupy about three times as much land as oil-fuelled plants, require new ports and railways and handling rigs, and present a pollution risk. In Japan, constraints on space make these disadvantages sharper than elsewhere.

The IEA meeting in May and the recent Venice summit have placed greater urgency on coal as an intermediate fuel between oil and nuclear power. In response, MITI has been goading the power companies into faster action, and has begun studying which of the country's 245 oil-fired power stations could be converted—in some cases re-converted—to coal.

The tentative breakdown of future steaming coal imports, now floating in the utilities and other consumer industries, gives Australia the largest share, with about 40 per cent with Canada, the U.S., China and South Africa supplying the rest. This would put Australian exports to Japan at some 21m tonnes a year by 1990.

Calculations by the Australian coal industry give a development cost of between A$90 and A$135 per annual tonne for a large open-cut mine and infrastructure. For Japan's requirements alone this means some A$2bn in investment.

Existing railways and ports along the east coast of Australia, where most of the new coal deposits are, provide little slack for expanded coal exports.

The Potential Japanese consumers are coming to realise that they will have to pay for this, one way or the other. It scares them, or at least they pretend it does.

The Australian miners say that current steaming coal prices, which have shot up by about A$12 to around A$35 a tonne over the last year, are still not enough to justify new mines. The Japanese say that a continuation of this price trend wkill erode the competitive advantage over oil, undoubtedly true but still a somewhat premature fear.

While Japanese interests, particularly the big trading companies and their mining affiliates, are taking up minority equity in Australian companies (and to their embarrassment have figured in recent takeover battles) in order to secure supplies, their Australian partners also look for provision of loan funds as well as long-term contracts.

Uneasiness still exists on both sides. The Australians worry about the conflict of interest inherent in end-users gaining equity and about the highly organised purchasing front Japan is assembling. The Japanese voice fears about possible intervention by Canberra to co-ordinate marketing—and above all about Australia's lamentable strike record.

On the Japanese side the steaming coal trade with Australia is being handled at the highest level of business. In April the Federation of Economic Organisation (Keidanren) sent a mission to Australia under its then chairman, Mr. Toshiwo Doko. In July it established an "Australian Coal Council," on which Mr. Doko and his successor, Mr. Y. Inayama, (who is also chairman of Nippon Steel Corporation) will serve.

The power utilities have set up their own joint venture, Japan Coal Development Company, which wil take the major role for the industry in investments and purchases abroad.

Uranium is a muted subject in trade discussions now. Japan has been taking uranium for some time from the Mary Kathleen Uranium mine controlled by Conzinc Riotinto Australia, but is not in a desperate position for supplies.

Three electric power companies and the trading house C. Itoh and Co. are to take up minority equity in the Ranger project, however, and seem likely to bring with them contracts for about 1,000 short tonnes of uranium oxide a year from commencement of production in 1982.

Discoveries

The Premiers of Western Australia and South Australia have been pushing the merits of the uranium discoveries at Yeelirrie and Roxby Downs in their respective States, but seem far from gaining contracts in Tokyo.

The insistence of the Japanese bureaucracy on Japan developing its own uranium enrichment programme is also taking the steam out of a joint study on co-operation on an Australian enrichment plant, although Australia has other potential partners in Europe.

Japan is rather more interested in two unconventional energy resources in Australia. A group of Japanese oil companies and the Industrial Bank of Japan missed out to Exxon in the bidding for partnership in Queenland's oil shale project at Rundle, but other groups are moving in on possible brown coal liquefaction schemes.

The "Kominic" group comprising Kobe Steel, Mitsubishi Chemical and Nissho-Iwai will shortly begin a study with the Victorian State government on liquefaction of the huge brown coal reserves about 150 km East o Melbourne. The Mitsui group h s been testing Victorian coal at a plant in Japan and has si nilar plans.

The aluminium industry is so far the chief pointer towards relocation of energy-intensive activities from Japan to Australia.

While the Japanese industry, under "administrative guidance" from MITI, is cutting capacity from 1.6m tonnes a year to about 1.1m, five large-scale aluminium smelters are due to come on stream in Australia over the next four years, taking output from 280,000 tonnes a year to almost 1.3m a year, with an investment of some A$2.5bn.

A group of Japanese companies headed by Sumitomo Light Metal will hold 50 per cent equity in the Comalco smelter at Gladstone, Queensland, due to start up in 1982 at a cost of more than $660m. Mitsui will join the comparable Alumex venture at Farley, New South Wales, while Kobe Steel is the leader of a Japanese group in the Worsley alumina refinery in Western Australia.

Japan was not the leader in this trend, it must be noted, but for many Australian industry promoters such as the West Australian premier, Sir Charles Court, it is the sign of how things will be in the future.

هكذا من الأجل

Oil in exchange for steel finance

MEXICO

AYAKO DOI

AT THE end of late Prime Minister Masayoshi Ohira's visit to Mexico last May, big headlines ran across the front pages of Japanese newspapers reporting Mr. Ohira's failure to draw a firm undertaking from Mexican President José Lopez Portillo to triple the export of petroleum to Japan. The Japanese Prime Minister landed at the Mexican capital with the rather naive optimism that the Mexicans would nod at the Japanese request in exchange for the yen credit which he was prepared to offer to finance Mexico's massive steel-manufacturing projects.

The Japanese were stunned when the two leaders came out of their two-day meetings with a joint communique which stated that while Mr. Ohira expressed his "desire and expectation" to get more oil, Sr. Portillo only promised his "political decision and good will" in considering the matter.

The issue was half-forgotten after Mr. Ohira's return home, buried beneath the news of the stunning passage of a no-confidence bill in the Diet, the unprecedented combined election to the Upper and Lower Houses which followed, and, most dramatic of all, Mr. Ohira's sudden death. The Government was obviously not in a position to make new proposals under such conditions.

Mexico's proven oil and gas reserves were a little over 6bn barrels in 1976. Extensive exploration since then has increased the amount to 500bn today, according to Pemex, the State-owned oil company. The country is now the sixth oil-richest nation in the world, exporting to the U.S., Brazil, Spain and France among others.

Moreover, potential reserves are said to exceed 200bn barrels, a level rivalled only by Saudi Arabia. Unlike Saudi Arabia, Mexico is not a member of OPEC, which makes it even more attractive as a supplier of the precious resource. However, despite the temptation to use oil as a means to improve its deteriorating trade balance, President Lopez Portillo's Government has pledged to limit the oil production to 2.5m barrels per day (b/d), with an allowance of 200,000 barrels upward, until his term expires in 1982. Only half of that amount will be exported in order to minimise inflation caused by a sudden influx of petro-dollars and more than half is said to have already been committed to the U.S.

Mexico's rich oil supply suddenly became a focus of interest for Japan when shipments from Iran were cut off early last year. Japan had depended for 17 per cent of its oil supply—about 500,000 barrels per day—on Iran, and was anxious to find an alternative source to secure its energy requirements.

Shipment

Last summer the Pemex director-general, Sr. Jorg Diez Serrano, agreed with visiting Japanese International Trade Minister Mr. Masumi Esaki that the company would sell 75,000 to 100,000 barrels per day of crude oil to Japan for the next 10 years. Shipment was to begin last January at a level of 25,000 b/d and the amount was gradually to increase to 100,000 barrels by the end of this year. Owing to the lack of preparation, however, Japan received no Mexican oil in the first quarter of 1980. The first shipload of 920,000 barrels, intended for April, arrived in Kagoshima on June 28 after the 16,500-mile voyage from the Mexican Gulf port of Pajaritos around the Cape of Good Hope and the Malacca Strait.

Two more ships have since left Mexico, each carrying 750,000 barrels for May and June respectively. They are expected to arrive in Japan in August.

To avoid confusion and competition among Japanese importers, 24 refiners and distributors, nine trading firms and three financial institutions in Japan formed, with the Ministry of International Trade and Industry's advice, a new company called Mexican Petroleum Import Company last autumn. The new company will act as an importer of all crude oil arriving from Mexico, as well as a distributor among the 24 shareholding oil companies.

When the Japanese recovered from their initial shock at Mexico's reluctance to sell more oil, there came a new interpretation of the Ohira-Portillo communique—that the Mexicans in fact were saying a conditional "yes." The condition obviously is Japan's larger participation in Mexico's three steel projects; an expansion of the Sicartsa steel works from the annual capacity of 1,350,000 tons to 2,800,000 tons; the construction of a casting and forging plant with an annual output of 50,000 tons; and another large-diameter steel pipe mill with 150,000-ton annual capacity.

Negotiations for these projects began more than two years ago, before the question of oil exports came up, between the Mexican government's steel corporation and three Japanese steel manufacturers. Nippon Steel offered to provide technical assistance for the Sicartsa works. Kobe Steel and Sumitomo Metals suggested joint ventures for the other two projects respectively.

As the world oil supply situation worsened last year, the projects came to be seen as a fitting bargaining tool for Mexico, which wanted financial assistance from the Tokyo Government as well as the private investments.

Although both sides were agreed in principle, a wide gap existed between the sums they had in their minds. Mexican Industry Development Minister Jose Andres de Oteyza, on his visit to Tokyo in April, suggested Japanese credits of Y100bn (about $455m), while Tokyo was talking about something in the vicinity of Y22bn ($100m). The Japanese figure was later raised to Y40bn before Mr. Ohira's visit to Mexico, but that still was not enough for his host.

After the political interval caused by the election and the appointment of the new Prime Minister, the Government now is said to be considering boosting of assistance from the Overseas Economic Co-operation Fund as well as talking two other steel makers—Nippon Kokan and Kobe Steel—into joining the projects. According to the Japanese Press, the matter has now become a "national project."

Predicted

"The fact that there are many speculations on the amount of Japanese financial aids," said Mexican Ambassador Francisco Alejo Lopez earlier this month in Tokyo, "shows a keen interest in the matter by the Japanese Government and industry." He predicted that an agreement would be reached within the next couple of months both on the steel projects and the boosting of oil exports. Japanese observers optimistically predict that Mexico will eventually come up with a positive answer to accommodate the Japanese request.

Oil import from Mexico will considerably be speeded up next year when the port of Salina Cruz on the Pacific coast is expected to begin operations. Mexico then will be a fast and stable supplier of oil to Japan. If Tokyo succeeds in getting 300,000 b/d from the oil-rich country—that is only 6 per cent of the national consumption—will it want more as the next step?

"That is not our intention," says an official at the Petroleum Association of Japan. "We want to diversify our sources, not to depend too heavily on one country."

Strong case for wider commercial links

SAUDI ARABIA

RICHARD HANSON

JAPAN HAS recognised its serious error of neglecting economic and diplomatic ties with the Arab world before the 1973 oil crisis. This was particularly true in the case of Saudi Arabia, which after the oil crisis replaced Iran as Japan's single largest supplier of crude oil. Unfortunately, the process of building up the relationship has proved agonisingly slow.

The history of Japan's ties with Saudi Arabia can be divided into two phases. Initially, when Japan began to import crude oil again in the early 1950s it was completely dependent on the Western majors for handling oil supplies from the Middle East. This simple cash-on-the-barrel attitude was reflected in an almost total lack of official interest in formulating a coherent diplomatic policy towards the Arab world.

Indeed strong opposition arose within the Japanese Government in the mid-1950s when a small group of influential Japanese businessmen proposed that a Japanese company should try to win oil exploration concessions in Saudi Arabia in competition with the West. They were successful, but even today the company, Arabian Oil (whose chairman is profiled elsewhere in this survey), is a relatively tiny source of oil for Japan. Other Japanese efforts to produce oil in the Middle East have been even less significant.

Ras Tanura—Saudi Arabia's main oil terminal. Tankers dock at a platform out at sea

Scrambling

This first phase ended abruptly in 1973 when tensions in the Middle East (and the emergence of OPEC) left Japan scrambling for assurances of oil supplies. There was a definite shift from even-handed policies towards Israel and the Arabs in favour of the oil producers, and envoys from Tokyo hastily tried to woo the Saudis with promises of economic co-operation.

The first talks on closer relationships with Saudi Arabia had languished since a 1971 official visit to Japan by King Faisal. When oil prices soared in December, 1973, though, the then Prime Minister, Mr. Miki, sent a high-level representative to propose a co-operative agreement. It required another 15 months before it was actually inked.

The agreement called for ministerial level meetings (there have been only two such events since the 1975 signing). The two sides also agreed that large development projects would be in the form of joint ventures, as was the case in Iran.

The results of the accord so far have been disappointing to both sides. In 1976 Japan proposed to co-operate on two major projects — a petrochemical complex and an oxidised steel project. The latter was quickly scaled down in planned size from 3.5m tonnes a year to 1.5m by the Japanese side (which included Nippon Steel, four trading companies and co-operation from a U.S. group). Interest was diminished by a turndown in the world steel market and higher construction costs. Saudi Arabia finally turned to a West German company for the project.

It would be extremely difficult, however, for the Japanese to neglect its commitment to building the $2bn "showpiece" petrochemical complex that Saudi Arabia wants as a joint venture with Petromin, its State oil company. The heart of the proposal is a 450,000 tonnes annual capacity ethylene plant in Jubail. The Mitsubishi group will represent the Japanese side, and the Japanese Government has already promised it will participate, giving it the look of a "national" project.

Mitsubishi began having second thoughts on the project because of higher costs and the lack of assurance of a market for a large new source of petrochemical products. To further complicate the situation, Mitsubishi has been horrified by the events in nearby Iran which have jeopardised the future of the multi-billion dollar Bandar Khomeini petrochemical project being built by Japan's second largest trading company group, Mitsui and Company.

With seemingly no way out, the two sides in April this year launched a feasibility study, the results of which should be known next year.

Negligible

Other efforts on the official level appear to have produced negligible results. In a typical recent year, under official auspices, only 115 Japanese advisers travelled to Saudi Arabia while 103 Saudis came to Japan for technical training.

At the private level Japan has fared much better in selling goods and equipment to Saudi Arabia. In 1978 Japan ranked second after the U.S. and well ahead of West Germany and the UK. Japanese heavy equipment makers have been particularly strong in exporting desalination, cement and other plants, while the motor industry and other lighter manufacturers have moved in strongly to meet Saudi demand.

The incentive to cut the large trade deficit Japan runs as a result of soaring oil prices is strong. Last year Japanese exports to Saudi increased by 18 per cent to $3.8bn but oil imports from Saudi Arabia jumped 43.4 per cent to $12bn.

"Pro-Saudi" people in the business community are warning seriously, however, that Japan must rethink its entire approach to doing business with the Saudis, both at the private and governmental level. The purely commercial approach to sales taken by most businessmen could eventually produce an anti-Japanese backlash, they warn.

The main criticism of the Government's approach so far is that officials have taken the passive position of asking the Saudis what they need and then promising to provide it, this has not worked so far, according to one observer with long-standing ties to the Saudi Government, because they Saudis themselves need much more basic assistance in deciding just what is required at their present stage of development.

The gap in understanding will not help Japan benefit from the huge amount of money to be spent under the third Saudi five-year development plan starting this year.

Finally, the Japanese will have to learn to live with the uncertainties of Middle East politics and religion. The fear among all Japanese involved in Saudi Arabian affairs is that the country could prove as unstable politically as Iran. This is a good part of the reason why Japanese businessmen have been wary of getting too deeply involved in large, long-term projects. But so long as Japan is dependent on Saudi Arabia for about 30 per cent of its oil, there really is no choice.

Peking supplies below hopes

CHINA

CHARLES SMITH

DIVERSIFICATION OF Japan's energy sources has been a prime object of Government policy ever since the first oil crisis exposed the danger of Japan's heavy dependence on oil from the Gulf. Supply from China is one of the principal elements of this diversification policy, but one which, increasingly, has come to disappoint early expectations.

Currently Japan draws about 3 per cent of its oil and about 2.4 per cent of its coal from China. Dependence on Chinese oil may rise to 5 per cent before the end of the 1980s, but Japanese officials stress that a higher figure is neither likely, nor even desirable, so far as Japan is concerned. The vision of a massive economic partnership based on China's natural resources and Japan's industrial might would thus seem to have been exaggerated.

One reason why the vision has not come true is that China has failed to increase its oil production as rapidly as was expected some years ago. Output from the major onshore fields grew by 2 per cent in 1979 to 106.15m tonnes (from 104.05m) whereas the Chinese Gross National Produce recorded a nominal growth of around 7 per cent and a real growth which may have only been marginally less. China's ability to produce surplus oil for export would thus seemed to have declined last year and Japanese officials expect it to continue to decline. "There is a real question whether China will remain an oil exporter," said one Foreign Ministry official.

Honoured

Despite what would appear to be a dwindling availability China has so far honoured its obligations under the eight-year private level trade agreement signed with Japan in February, 1978. This called for an increase in shipments from 7m tonnes in 1978 to 7.6m tonnes last year and to 8m tonnes this year. China has promised to ship the contracted tonnage this year and may well succeed in stepping up shipments further to the 9.5m tonnes laid down for 1981. Beyond that, however, the outlook is doubtful. The Chinese premier, Mr. Hua Guo Teng, on a visit to Tokyo in May, hinted that there might be difficulty in reaching the 15m tonnes set for 1982.

China's warning that it may not be able to fulfil its oil supply obligations in 1982 represents an ironic shift from the situation during negotiations on the two-year trade agreement. At that time it was Japan that had doubts about its ability to absorb Chinese oil and China that "insisted" on the insertion of relatively high figures into the agreement. China's anxiety to maximise its oil sales to Japan arose from its desire to import large quantities of Japanese plant and equipment and to offset the cost of these by oil exports.

The question of whether China can or cannot fulfil its 1982 export obligations will depend partly on the trend of production at existing onshore fields (where water is already being injected to produce a secondary oil flow) and partly on China's domestic demand. Beyond 1982 the important question will be whether and on what scale China can develop new oilfields. Japan will be taking an active part in these developments through its partnership in a joint venture in the south-western portion of the Bay of Bohai.

The venture has taken time to get off the ground but an operating company has been established and exploratory drilling should get under way this summer. The project is being financed in part by drawings from a low interest rate Y420bn loan extended last year by Japan's Export Import Bank to assist China in resource development.

The Bohai Bay project is not the only oil development one on which China is embarking with foreign assistance. Western oil companies have signed agreements to conduct seismic surveys in the Huan Hau and South China Seas areas, and China has (very recently) hinted that it may invite Western assistance in onshore drilling. Japan will not, however, seek a major role in any projects other than Bohai—although it may act as subcontractor in some other ventures.

Ambitious

Development of coal imports from China is regarded by Japanese Government officials as being as important a step as with oil—if not more so—although here too early expectations are now regarded as over-ambitious. Imports rose from 772,000 tonnes in 1978 to 1.407m tonnes last year (both steam and coking). They should hit 3.5m to 3.7m tonnes in 1982 and were at one time expected to reach 10m tonnes by 1985; this last figure is now regarded as a "very ambitious."

What is certain is that Japan will assist China in the development of three high-grade coalfields: Yanzhou Baodian (with an estimated output of 3m tonnes of steam coal per year), Yanzhou Jiangzbuang 1.5m tonnes of steam coal) and Gujiao Xigu (3m tonnes of coking coal). These developments will be financed from the same Y420bn line of credit as the Bohai Bay oil project, with the coal projects taking slightly less than half the total.

China is officially responsible for providing the infrastructure needed to back up the new coal-mining ventures but will be receiving some Japanese help in this area also. This will come in the form of a low interest rate Y50bn loan to be extended by the Overseas Economic Co-operation Fund (a Government agency specialising in soft loans to developing countries).

China initially rejected all Japanese offers of "aid-type" financing but began to show signs of shifting its position when the late Prime Minister Masayoshi Ohira visited Peking in December last year. In April a memorandum of understanding was signed on the OECF loan, with China providing a list of projects to be financed by it. At least two of these (a port nad a railway) are thought to be related to the Japanese-financed coal-mining ventures.

The scope for developing Chinese coal resources for the Japanese market could be enhanced in future by the use of coal liquefaction. If this happens coal, rather than oil, could eventually emerge as the main resource underpinning Japan's trade with China.

Abundance on northern doorstep

SIBERIA

MARK MEREDITH

WITHIN EASY reach of Japan are coal fields, potentially vast quantities of natural gas, and maybe oil. But because these resources are in Siberia, Japanese government officials count them out when calculating their future energy needs.

"We do not have an energy orientation towards the Soviet Union," was the way one senior Japanese diplomat put it. The production of coal and natural gas in south Yakutia or the exploration for oil off Sakhalin Island to the north of Japan are all in various stages of exploration, negotiation or development. The capital investment is there, the industrial interest in Japan is there but so are the political worries.

Japan's desire to help out with China's modernisation programme and the uncertain state of East-West relations has led to a considerable amount of foot-shuffling on both sides in expanding the contacts between these two obviously complementary economic areas.

The most tangible of the energy-related projects is the development of the huge coal mountain in south Yakutia with reserves estimated at 450m tonnes.

The town of Neryungri has grown up around the excavation and a spur of the main Soviet BAM railway line was constructed to carry equipment to and coal from the site.

Under an agreement signed in 1974 the Soviet received a $450m credit from Japan to buy mining equipment. The Japanese were to receive 100m tonnes of coking coal over 20 years from 1979 — most of it from Neryungri when it comes into full production in 1983.

Last year a further $40m was agreed for the construction of a coal grading plant.

The additional credit extension followed a session of the Japan-Soviet Joint Economic Commission which met in Moscow to give a bit more momentum to development projects. But at Neryungri, the site of the Yakutia project, the huge diggers soon unearthed a problem. When the soil had been pulled away a heavy layer of steaming coal was found on top of the coking coal.

Minimal

Buyers had first to be found for the steaming coal and purchasers were not queueing at the door. Japan's demand for steaming coal is still quite small and its stockpiling facilities minimal.

In Yakutia as well lie potential natural gas resources which could dwarf all the other energy development. Both Japan and the U.S. have taken an interest and in vested $25m each in the Soviet exploration of the area. If the Soviets can confirm estimates of 1,000bn cubic metres of gas reserves then the project could go into the development stage. According to the Japanese side the Soviet Union has confirmed nearly 85 per cent of the reserves so far.

Japan and the U.S. could each eventually import about 10bn cubic metres of gas in the form of liquid natural gas (LNG) if the development bears fruit. This would be enough to meet Japan's projected LNG requirements in 1985 according to industrial estimates.

The extent and the cost of the infrastructure present the real problems. Japan will not go ahead with the development without the U.S. or another third party and U.S. participation would be so costly and politically sensitive it would require congressional approval. Japan and the Soviet Union have also differed on the methods of transporting the gas to the Soviet Pacific coast.

As the ice clears in May and June off the Pacific coast around Sakhalin island, two Japanese oil drilling plants are towed from their bases on the northernmost Japanese island of Hokkaido to resume drilling off the north-east coast of Sakhalin.

Eleven wells have so far been sunk into the 200-metre deep shelf and four have so far struck deposits of oil. The latest strike has been in the so-called Shayvo structure. A three-phase development programme is designed to develop the project if it proves commercially viable over the next five years.

Political snags arose here too as U.S. advisers or equipment have been used on the rigs and there were fears that the American ban on high technology exports to the Soviet Union would cripple the operation.

The project is backed by the Sakhalin Development Company which was set up in 1974 by a group of private concerns with a combined capital of Y18bn. The Japanese Exim bank has already backed 50 per cent of the development.

No shortage of time to play

LEISURE

DEREK DAVIES

A VISITOR to Japan these days could well conclude that people have cured themselves of "workaholism" and turned into a nation of leisure maniacs. Almost anywhere you look there are joggers in sleek sportswear, rollerskaters spinning about the parks, tennis players practising under highways and baseball pitchers on almost every street corner. Sports apart, the cities are bursting with enough bars, coffee shops, pinball parlours, game centres, cabarets, Turkish baths, restaurants and discotheques to keep the Japanese at play 24 hours a day.

What then happened to the energy crisis? Haven't those hefty price increases sent the oil-vulnerable Japanese scurrying back into their factories to toil even harder to keep up the rate of growth? Apparently not. Indeed, some sectors of the leisure business are benefiting from the higher oil prices.

Another reason is that the Japanese have more time on their hands. In 1970 the average employed person worked 255 days a year. By 1975 his stint was down to 236 days

With longer holidays and the five-day week gaining acceptance, he is only expected to be at work for 224 days this year. By 1985 it is estimated that the Japanese working year will be on average of 211 days.

At the same time, the Japanese are spending more money on leisure. Total spending on all leisure pursuits in 1979 (nearly Y30,000bn) was seven times greater than in 1965 (just over Y4,000bn).

But while leisure time and spending are increasing, patterns of leisure activities are changing. "After the first oil shock in 1973 the Japanese way of thinking about leisure began to change," says Mr. Kenzo Yamada of the Japan Leisure Centre.

With this trend, night-life entertainment declined briefly and there was a boom in all sorts of sports as well as hobbies and do-it-yourself activities.

These trends sparked off by the first oil crisis have continued after the second. Sports continue to be a high growth area in Japan, with increasing enthusiasm among Japanese youth for tennis, diving, swimming, jogging, gymnastics and other individual sporting activities.

In the sixties and early seventies concentrated package tours were lined up back-to-back by travel agencies but now the Japanese are beginning to enjoy less group-orientated travel—setting up trips themselves and finding their own lodgings, often near good sporting facilities.

Increased transportation costs have inevitably had a major effect on travel. The Japan Automobile Federation says there is a trend towards short-distance journeys and day-trips while long weekend car trips are becoming less popular. Similarly, the Japan Travel Bureau reports that long high-cost trips within Japan are declining. And during this year's national spring holiday, known as "Golden Week," domestic airlines reported steep reductions in flight bookings.

At the same time the number of Japanese travelling abroad, which reached a peak of 4m last year, 80 per cent of them tourists, levelled off in the early part of this year because of higher fares, a weaker yen and increased prices abroad.

Other factors, too, affect the changing patterns of Japanese leisure, and the Japanese are as much influenced by fashions, fads and technical innovations as anybody else. Computer-based electronic games, tremendously popular among young people, have even created their own social problems with school children turning to petty theft to satify their enthusiasm. Discotheques, too, have become one of the fastest growing leisure outlets in recent months—increasingly frequented by middle-aged businessmen.

In the boom years, when the Japanese economy was hurtling along, the Japanese were sweating blood to keep up the pace. Now that pace has relaxed a little the people, particularly the younger Japanese, are also relaxing more. The goal of catching up with the industrial West has been achieved and it is being replaced by another goal known as "the quality of life."

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JAPAN XV

The remaining four pages of the survey carry profiles by Charles Smith and Richard Hanson on twelve leading personalities drawn from a cross-section of Japanese life —presenting in particular their views on the energy crisis.

Kiyoaki Kikuchi

IN ANSWER to the question of whether Japan will have to change its foreign policy because of the energy crisis, Mr. Kiyoaki Kikuchi, the Foreign Ministry's top official in charge of economic affairs, says: "It has already happened."

Up until 1973 Japan was "even handed" in its policy towards Israel and the Arab world. Since 1973, says Kikuchi, "we had to give due weight to the countries." What that means is giving explicit support to United Nations resolutions on the Palestine problem and (by stages) a degree of recognition to the PLO, which now has an office in Tokyo.

Kikuchi says that until the recent EEC Venice summit, Japan was well ahead of Europe in its position on the Palestine issue. But the fact wasn't recognised "because we are no good at public relations." On the other hand, Europeans, especially President Giscard d'Estaing, are adept at PR, he claims.

Kikuchi says that Japan's present foreign policy should definitely not be characterised as "resource diplomacy," an expression which was dreamed up in 1974 by the Ministry of International Trade and Industry and which attracted a lot of bad publicity. "I felt this with my own skin at the OECD Development Assistance Committee meeting in 1974 when the European nations accused us of distorting our aid policy in favour of the oil producers."

Mr. Kiyoaki Kikuchi

The accusations were partly fair, but only partly, Kikuchi believes. What Japan actually did after the first oil crisis was to give additional aid to the Arab countries, rather than divert aid away from others. Moreover it gave, or tried to give, aid to both non-oil producing and oil producing Arab states. Kikuchi sees nothing wrong in this aspect of Japan's post-1973 energy diplomacy but he does dislike the term resource diplomacy which carried all the wrong implications. "BITI has been told not to use it any more," he says flatly.

As far as the second oil crisis is concerned, Kikuchi (who spent several years running Japan's aid policy) says he expects the impact on aid can only be negative. "We would like to keep up the level of our aid programme but it could be difficult." Countries like the U.S. can switch from giving money to giving food when higher oil prices reduce the availability of funds but Japan lacks this option.

"We tried giving our surplus rice (even though rice costs in Japan are five times the world market level) but the U.S. accused us of undermining their traditional markets. That may leave helping non-oil producing countries to develop energy resources as our best aid-giving option. We are also telling the Communist industrial countries that they have to do their bit—at least that may put them on the defensive."

Seeking a "stake" in overseas oil production as a means of ensuring Japan's energy supplies is an "outdated notion" and "not likely to work." What will probably happen, according to Kikuchi, is the reverse: it will become more and more difficult to resist the damands of oil producers for a stake in the "downstream" oil industries of Japan—even down to the level of petrol stations.

This development is seen by Kikuchi as "ominous but inevitable." He adds, however, that, where coal is concerned, Japan could get heavily involved in overseas production. "This will not be because we want to be involved, but because countries like Canada, the U.S. and Australia are inviting us in. Rightly or wrongly they think Japan has the money to make the massive infrastructure investments needed for coal development."

Kikuchi is optimistic about the development of Japan's world role in the aftermath of the second energy crisis. "The Japanese press is masochistic and has always exaggerated the extent to which we were the odd man out at summit conferences," he says. Even so, the Venice summit may have been a turning point. As "stand in" for Foreign Minister Saburo Okita (who was himself standing in for the deceased Prime Minister Ohira) Kikuchi attended no fewer than four highly informal sessions of the foreign ministers of the seven during the two days in Venice. "It was the first time, to my knowledge that a genuine trilateral get-together of foreign ministers from the U.S., Europe and Japan has taken place and I hope it continues," he says.

Insight

Kikuchi's job as one of the two deputy ministers at the Japanese Foreign Ministry gives him special responsibility for economic affairs but he does not see himself as a "narrow" economic specialist. Seven years in Washington dealing with such thorny issues as textile quotas and dumping charges gave him an insight into the interplay of politics and trade issues in the U.S. A couple of years as private secretar y to Mr. Masayoshi Ohira when Mr. Ohira was allocated the foreign ministry provided insight into the working of Japan's domestic politics.

Kikuchi was thus the natural choice for Ohira's personal representative during the preparations for the Venice summit. "It was a tragedy that the Prime Minister died before he could go to Venice. I took his photo with me and tried to do things the way he would have done them."

C.S.

Naohira Amaya

NO-ONE KNOWS what lies ahead for Japan so far as energy supplies are concerned, but Mr. Naohiro Amaya, Vice-Minister for International Affairs at the Ministry of International Trade and Industry (MITI), thinks the surprises are likely to be unpleasant rather than the reverse. "My personal guess is that we will face very serious oil supply problems in the next decade . . . because of this I cannot honestly say that we have the situation under control."

Mr. Amaya says Japan needs to spend much more on developing alternative energy supplies, and particularly in furthering the growth of nuclear power and coal than has been done up to now. "We should use the revenue from petrol tax to develop alternative energy, not to build roads, although ten years ago it was right to use it for road building.

Deluded

Mr. Amaya thinks there is an important job to be done in convincing Japanese public opinion of the gravity of energy problems and that one reason why the job has *not* been done is that economic success has deluded the country into a false sense of security.

Mr. Amaya thinks "a lot more" than the Y7,000bn (about £14bn) which a Government committee said two years ago should be spent on developing new energy resources over the next decade actually needs to be spent (the figure relates only to government spending and investment). "We may have to increase taxes, but the subject of tax has been taboo until recently." With a greatly strengthened ruling party (following Japan's last general election in which the Liberal Democrats scored a landslide victory) and a new Prime Minister, Mr. Amaya thinks some of these pressing issues might just conceivably be tackled.

Mr. Amaya's views on what Japan should be doing outside its own frontiers are as forthright as his opinions on domestic policy. "Since my Ministry is in charge of trade I can only express a personal opinion on foreign policy issues, but it seems clear to me that Japan and other industrial countries should give more consideration to the interests of the Palestinian people." Mr. Amaya also thinks that the Middle East expects Japan to bring its influence to bear in effecting a change in U.S. policy on the Palestine issue. Whether Japan actually has such influence is doubtful, he admits, but that does not alter the need for action to avert probable future upheavals in the Middle East which could seriously endanger oil supplies.

On the question of economic co-operation with oil-producing countries Mr. Amaya's view is that "those countries are powerful and we must do what they want." If the oil producers persue programes of industrialisation based on the import of major plants (steel, petrochemicals, etc.) Japan "must" supply such plant, Mr. Amaya says. But just supplying plant is not the end of the matter. There is also the question of whether industrialisation by oil-producing countries can be viable.

Mr. Naohiru Amaya

Companies such as Mitsui (sponsor of the ill-starred \$3.3bn Iranian petrochemical complex) have no option but to press ahead with their projects even if to do so costs them money. One reason why they must persist is that "if the oil producers decide to give up their industrialisation programmes they might also stop producing oil. Fortunately, Mr. Amaya notes, the major oil-producing countries still appear to be dedicated to industrial development. "It is encouraging to see that the revolutionary government in Iran is still extremely anxious to complete the Bandar Khomeini petrochemical complex."

One of the problems Japan faces in doing business with oil producing countries, Mr. Amaya says, is that companies which are in a position to supply the hardware the oil exporters want may not necessarily have any interest in oil. The steel industry, for example, has no special incentive to build plants overseas so that the refiners can increase their oil purchases. A way round this Mr. Amaya speculates, might be to create a "giant company, on the model of your East India Company, which could absorb everything into its stomach."

The essential element would be the risk-bearing function—in other words the same company would benefit from the increase in oil imports while bearing the risks on involvement in heavy industrial ventures. Mr. Amaya says, however, that there is absolutely no way in which such an entity or entities could be created today. It would take a major crisis to bring about such an important change in the structure of Japanese business.

Headlong

If Japan runs headlong into another oil crisis the result, Mr. Amaya forsees, would be a repetition in a greatly intensified form of the "structural recession" (i.e., recession in energy-consuming industries) which followed the 1973 oil crisis. Industries such as aluminium and petrochemicals and perhaps even steel could face a grim future in such a situation. To some extent several of those industries will need to be phased out in any case.

What Japan needs instead, Mr. Amaya says, are technology-intensive industries that use less energy and provide more added value. Bringing such industries into existence will not be easy but MITI, Mr. Amaya implies, is working on it.

C.S.

Masumi Esaki

MR. MASUMI ESAKI, a senior member of the ruling Liberal Democratic Party and former Minister for International Trade and Industry, has become Japan's roving "Energy Ambassador" since the Iranian revolution jolted international oil trading two years ago. He has travelled to both the Middle East and Mexico (as the Prime Minister's special envoy) seeking direct deals on oil supplies, and expects another trip soon.

The 65-year-old Lower House Diet member (first elected in 1946) has long been identified with two of the country's most difficult problems — defence and energy. In the 1960s he served twice as Director General of the Defence Agency, and presently leads the National War Veteran's Association. As MITI Minister two years ago in the first Cabinet of the late Mr. Ohira, he claims to have launched Japan's first serious energy "diplomacy" effort in the Middle East. Mr. Esaki believes strongly that Japan's security rests squarely on the success of that effort.

Mr. Masumi Esaki

Mr. Easki was in charge of the Defence Agency during the turbulent times which followed the "railroading" of the U.S.-Japan Security Pact through the Diet in 1960, as a result of which he thoroughly appreciates the importance of the U.S. "nuclear umbrella" to Japan's defence. He blames, however, what he calls the U.S. "oil umbrella" for much of Japan's present vulnerability to oil crises.

His rather extreme view is that post-war American policy was aimed at keeping Japan under the thumb of the big American oil companies, which until recently supplied the bulk of its oil. The domestic oil industry was hurt badly when the majors shut off supplies to non-affiliated companies after Iranian oil was cut off.

"The oil umbrella was torn to shreds by the sandstorm which swept the Middle East in 1973," says Mr. Esaki. "We had an energy policy but no Arab diplomatic policy," he adds.

Identified

Mr. Esaki has since become so clearly identified with Japan's economic self-interest in procuring oil that when the Afghanistan crisis prompted a "political" trip round the Middle East in February the Prime Minister had to pass him over in favour of a former Foreign Minister. "I have oil on my face," he explains.

The efforts of the "Energy Ambassador" seem to be paying off. His trip to Mexico earlier this year on the heels of Prime Minister Ohira resulted in a much firmer commitment from the Mexicans to raise shipments of crude oil. Mr. Ohira had been able to get a public promise of shipments of 100,000 barrels per day (b/d) by the end of 1982. Mr. Esaki confirmed a Mexican willingness to export 300,000 b/d in 1982. He attributes his success (with the modesty expected of a politician) to a "clean heart" in talking with others and a no-nonsense negotiating style of "telling others just what Japan's situation (regarding oil) is."

Mr. Esaki's hawkish stance on defence and energy (he is also a strong advocate of nuclear power) has become more and more popular in and out of the ruling party, and has gained more support fro mthe public at large than in past years. (His approach to defence, however, advocates more than just modernising weapon systems, and increasing the budget, he feels strongly that the Japanese people "in spirit" have not yet recognised how important the miltary are.

The military emphasis in Mr. Ssaki's career dates back to World War II when he served as a captain in the Japanese expeditionary force in China. Before that his main goal in life seems to have been writing novels. In fact he was the runner-up for Japan's most prestigious literary award, the Akutagawa-show in 1935, for what he describes as a "young romance" story. His 14 terms as a legislator since the war have, however, left him no time to continue such "peaceful" pursuits.

R.H.

Masao Segawa

THE LAST time electricity rates went up in Japan—by a whopping 50 per cent at the beginning of April—both the electricity utilities and the Government officials concerned in fixing the amount of the increase became aware of a very important fact. Oil-fired thermal power stations now cost almost twice as much to operate as nuclear power stations (Y20 per kWh compared with Y11) and are getting relatively more costly with each successive oil price increase.

The cost differential between oil and nuclear power is one big reason why Japan must press ahead with its nuclear power programme, says Mr. Masao Segawa, the bespectacled former Minister of International Trade and Industry (MITI) official who runs the Power Reactor and Nuclear Fuel Corporation (PNC), Japan's equivalent of Britain's Atomic Energy Authority. Mr. Segawa adds that it would be a good thing if the Japanese public could be made to appreciate the benefits of cheap nuclear power by the introduction of special power rates for those living near nuclear power stations.

This, however, he acknowledges to be difficult. Japan's laws are framed to prohibit the giving of political "favours" to power consumers and the laws are jealously guarded by MITI's Public Utilities Bureau (of which Mr. Segawa himself is a former Director General).

While stressing the cost advantage of nuclear power Mr. Segawa admits that it will not always be as cheap as it is now. Japan is badly behind in the development of the "nuclear fuel cycle" (the process which begins with uranium mining and enrichment and ends with reprocessing and storage of spent fuels and wastes from light water reactors) and will have to spend money to catch up.

"I have been telling the Government and the power companies for the past 10 years that it is not enough for us just to build light water reactors." says Mr. Segawa. He estimates that the necessary investments in completing the cycle will add 10-15 per cent to the cost of nuclear power generation in the near future, though even then it will still be much cheaper than oil.

The most urgently needed investments, says Mr. Segawa, are in the "downstream" end of the nuclear fuel cycle—i.e. in the reprocessing and storage of wastes, rather than in enrichment. Japan has successfully developed its own enrichment technology based on the centrifuge process, after finding that Western technologies were classified for military reasons. "However, we don't feel the need for more than 20 per cent self-sufficiency in enrichment—given world over-capacity in this area."

In reprocessing, where Japan started far behind the West, the current situation is that PNC operates a pilot plant based on French (St Gobain) technology, while plans are under way for a second commercial-scale plant to be operated by a private company. Japan will in the long run adopt a "multinational" approach to the development of reprocessing (and fuel storage(, favouring projects which jointly managed or financed by a number of countries rather than the attainment or preservation of national self-sufficiency.

So far as reprocessing is concerned, however, the multinational approach will have to wait "until we build our third plant or later." Co-operation in fuel storage could come earlier: "For example we are now talking to the Americans about a proposal for joint storage in the Pacific Ocean: the so-called Pacific Storage Basin."

Mr Segawa says he is worried about the impact (in the short term) on multilateral co-operation that might follow from a tightening of the U.S. Nuclear Non-Proliferation Act of 1977. "Our position on nuclear co-operation at present is close to that of Euratom and some way from that of Washington. But Europe is nine countries and we are one, so it is quite hard for us to disagree with the Americans."

When Mr. Segawa is not worrying about the nuclear fuel cycle he is planning the development of advanced reactors to take over from the American-style light water reactor as the next generation of Japanese nuclear power stations. His main stress here is on the importance of the heavy water Advanced Thermal Reactor (ATR) as a "bridge" between the light water reactor and the fast breeder. The fast breeder will barely make its appearance in Japan before the end of the century as a commercial source of power, says Mr. Segawa, so there will be at least a decade in which the ATR will be needed. A strong argument in favour of the ATR is that by consuming plutonium produced from light water reactors it should cut down on the security

Mr. Masao Segawa

risks of accumulating plutonium stockpiles.

PNC has a prototype ATR already in operation and claims to be pleased with the results it has been getting. The UK Steam Generated Hot Water Reactor (SGHWR) was moving roughly in parallel with the PNC project until it was abandoned in what Segawa obviously regards as faulty decision.

Mr. Segawa says his organisation has learned a lot from Britain(and in particular from British Nuclear Fuels, the company which processes half the spent fuels from Japan's light water reactors under a contract which continues up to 1990). He stresses, however, that there are areas where he would like to see a freer flow of ideas between countries involved in nuclear power. "Until ten years ago countries which had developed nuclear weapons kept almost all their know-how on the peaceful applications of nuclear power to themselves even though it was not officially classified.

Mr. Segawa obviously believes that the judicious pooling of knowledge can help make nuclear power a safer energy source in future rather than the reverse. He cites one Japanese innovation which could already be taken up by other countries—a mixed oxide fuel for ATRs which is "hijack proof" because it can be produced without the emergence of pure plutonium.

There could be other areas where the West will find itself benefiting from Japanese innovations and experience, particularly if PNC is as successful as it hopes with its ATR programme. Nuclear development, however, is a "long haul" and, for the time being, Mr. Segawa puts most of his stress on the amount of catching up to be done.

C.S.

Gaishi Hiraiwa

Mr. Gaishi Hiraiwa might be taken for a benevolent country gentleman rather than the boss of the world's largest privately owned power supply company, Tokyo Electric Power. A Tokyo University law graduate who has spent his working life with Tokyo Electric and its predecessor companies, Mr. Hiraiwa was awarded the CBE in the 1980 New Year Honours. He won the award for services to UK-Japanese trade relations—meaning specifically his company's great importance as a customer for Shell and BP (liquid natural gas), Rio Tinto Zinc (uranium) and British Nuclear Fuels (reprocessing of *spent nuclear fuels*).

As president of Tokyo Electric Mr. Hiraiwa is the spokesman for an industry which accounts for about a tenth of the private capital investment in Japan (some Y3,000bn, or £6bn, a year) and whose pricing policies can exercise a profound impact on the economy as well as on the daily life of people. Mr. Hiraiwa's first concern at the moment is to convince people that the increase of over 40 per cent in electricity charges enforced this spring was not unreasonable. Given the extremely difficult circumstances in which the power companies have been operating.

Measures

Most of Japan's nine private electricity supply companies *still depend on oil* for nearly 45 per cent of their fuel requirements, Mr. Hiraiwa points out, *although* Tokyo Electric has managed to get the ratio down to just over 40 per cent. The doubling of oil prices last year thus was bound to force an increase in charges—especially as the companies are simultaneously having to spend heavily on anti-pollution measures. The cost of providing "clean" power instead of "dirty" in overcrowded Japan is estimated at some Y600bn (£1.2bn) a year for the nine power generators—a sum which would dwarf the *total* amount of capital investment in several other major Japanese industries.

Considering all these burdens it is quite creditable, says Mr. Hiraiwa, that electricity charges have risen by a factor of 134 over the past 45 years or so. The price of a haircut in Tokyo, by contrast, is 5,000 times what it was before the war.

Mr. Hiraiwa says that Tokyo Electric is substantially ahead of the electricity industry as a whole in reducing its dependence on oil, partly because it saw the oil crisis coming earlier than most and partly because it was exceptionally sensitive to pollution problems. The company drafted a long-term energy diversification programme in 1971 (the year the Club of Rome report was published) and passed its peak year of oil dependency in 1973 (with 72 per cent of generating capacity based on oil).

The main directions of diversification have been towards liquid natural gas (lng), which was selected for its cleanness rather than its cheapness and nuclear power, where Tokyo Electric was able to get a valuable head start in finding sites for power stations. Tokyo Electric today gets 15.3 per

Mr. Gaishi Hiraiwa

cent of its power from nuclear reactors, against a national average of 12.6 per cent, but none of this comes from power stations within the Tokyo area. Fukushima Prefecture in the North-Eastern part of the main island of Honshu plays host to the main Tokyo Electric nuclear power generating complex, although not itself consuming any nuclear power.

Mr. Hiraiwa says that his company will continue building up its nuclear generating capacity during the 1980s and will stick to its policy of locating power stations outside its Tokyo franchise area. Because of this policy he sees little logic in a proposal being mooted elsewhere to offer cheap power to people living near nuclear power stations. His view is that the regional economies of major urban areas such as Tokyo and rural areas like Fukushima are complementary, so their power supply systems should be complementary as well.

Mr. Hiraiwa has no hesitation in saying that Japan's nuclear power industry operates much more smoothly and safely than the U.S. nuclear generating industry. "I'm convinced the situation is better here as regards the safety of the equipment itself, the quality and qualifications of our operating staff, and the effectiveness of our monitoring systems." Because of this nuclear power will remain a safe and economic source of energy whatever happens elsewhere, Mr. Hiraiwa says.

He sounds less confident about coal (with LNG and nuclear power the third major *prong of Japan's energy diversification policy*) but admits that its problems have to be tackled. "We are beginners with coal but we can't ignore the fact that world coal reserves are at comfortable levels, so that it is bound to be used sooner or later. What we have to do first is to find ways of handling the pollution problems involved with really massive coal fired stations of the kind that we are likely to be building in future.

Handling

"After that comes the question of infrastructure, including the building of railways and ports in the producing countries. Last but not least there is the problem of handling the ash from the used fuel. The experience we had in the past with small power stations burning domestic coal will be no use to us because the new generation of coal powered stations will be tremendously big."

Mr. Hiraiwa says he looks forward to a day when Tokyo Electric will have substantially completed the task of diversifying away from oil and when investment in new generating capacity can be financed out of revenue. Funding the Y1,000bn a year which the company needs for its current investment programme is a major headache and involves extensive resort to the bond market as well as substantial bank borrowing. Another prospect to which he looks forward is the day when industrial power consumption in Japan can be brought into balance with domestic consumption (at present it is much bigger).

Mr. Hiraiwa has seen 40 years in the power supply industry and is not a man to be unnerved by the stresses through which his industry is now passing; neither does he underestimate the difficulties.

C.S.

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Toyoaki Ikuta

JAPAN FACES a trade-off between economic growth and dependence on imported energy and should decide which it wants, according to Mr. Toyoaki Ikuta, president of the highly respected Institute of Energy Economics. Growth of 5 per cent or more a year would be a "happy level," according to Mr. Ikuta, but would mean that the nation's already perilously high level of dependence on imported energy would become higher still. Growth of 4 per cent or less would be "safer" in energy terms but would force some uncomfortable changes on a country which for years has been used to rapid growth.

The largest and most worrying consequence of less than 4 per cent growth, according to Mr. Ikuta, would be decreasing job security for older people. He himself has just reached 55, the age at which most Japanese businessmen are expected to retire from their "main" job. He is a former MITI official now on his second career and therefore has "no worries" about *job* security. But he has plenty of friends who do worry so the problem, as far as he is concerned, is very close to home.

Mr. Ikuta's basic point about the "trade-off" between growth and energy supplies is that the Japanese public (and its politicians) should recognise that it exists and make a choice. "I tell my friends in the Diet (Parliament) that they should discuss the actual energy problem—not the peripheral aspects of it that usually come up for debate. But I can get no satisfactory answer." Until and unless the realities are faced, he implies, Japan will be drifting as far as energy is concerned with the prospect of worse crises than those it has already encountered.

Ironically

Mr. Ikuta has two reasons for not being very optimistic about the chances of a sudden improvement in Japan's energy situation. One — related to energy conservation — is that Japan has, ironically, done almost too well already. "The amount of energy consumed per unit of industrial production in Japan is already about the lowest in the world and we are getting one of the best ratios of GNP growth to energy consumption — 1 to 0.6. That means there is not much scope to improve on our conservation performance and we must expect to remain near the point we have already reached." An indicator of where Japan stands on energy conservation, says Mr. Ikuta, is the fact that the Venice Summit of industrially advanced nations set, as a target for the ratio of GNP growth to energy consumption, the 0.6 figure that Japan has already reached.

So far as "alternative" (i.e. non-oil) energy is concerned, Mr. Ikuta has another reason for being doubtful about Japan's prospects. "Our alternative energy programme has proceeded not so successfully up to now because of the huge problems we face in the field of environmental control. The problem, in essence is that Japan is territorially too small and that sites for nuclear or coal-fired power stations are extremely hard to find. Additional restrictions brought in by zealous local governments (over and above national environmental guidelines) have made things even more difficult. For example, it is impossible today to build a coal-fired power station in the Tokyo or Osaka areas because local government regulations on emission do not permit it.

Discrepancy

Mainly because of his fears about environmental problems, Mr. Ikuta disagrees with the official "estimates" for the production of alternative energy and cites his own much lower set of figures. An ironical point about this disagreement is that Mr. Ikuta happens to be chairman of the MITI Energy Demand and Supply Forecasting Committee which is responsible for producing the official figures. But there is a good reason for the discrepancy Mr. Ikuta says. The official "forecast," he says, should really be called a "programme" since it represents what is desirable rather than what seems realistically probable. Mr. Ikuta is on record with a request to change the terminology accordingly.

Mr. Ikuta says the shortcomings of Japan's alternative energy development programme would matter marginally less if the country were better at getting hold of oil, but in fact (on the basis of statistics on price and quantity of oil imports) Japan is a "weak" oil importer. He attributes this to the Government's failure to adjust an oil policy drawn up in the plentiful 60s to suit the circumstances of the oil-starved 70s.

In the 60s Japan took the availability of oil for granted and concentrated on protecting its domestic refining industry against "invasion" by foreigners. A decade later the same laws were still in place although there had ceased to be much point in keeping foreign capital out of Japanese oil companies if that meant that the companies concerned could not get enough oil. Japan paid for its error last year when the international majors started cancelling their contracts to ship oil to "third parties" — i.e., Japanese companies in which the majors lacked a capital stake.

Mr. Ikuta's ability to show up the weak points of Japan's energy situation makes him appear a confirmed pessimist but he himself would question this assessment. The job that he and his staff try to do is to "say things that cannot be said by others (i.e., either the Government or the private sector) and in the process contribute to improving Japan's energy situation. Mr. Ikuta's institute, which was 14 years old last month, is now famous for doing this even if it has yet to force major changes in Government policy.

Mr. Toyoaki Ikuta

C.S.

Toshikuni Yahiro

MR. TOSHIKUNI YAHIRO is president of Mitsui and Company, one of the top two general trading companies that handle the bulk of Japan's imports and exports. He also happens to be the man who in 1972 took over responsibility for the project which has since become Mitsui's biggest nightmare—the $3.3bn Bandar Khomeini petrochemical complex.

"Part of my mind is always on Iran," says Mr. Yahiro, who gave up direct charge of the project last year when he became chief executive. The urbane, 65-year-old president would prefer to spend his time trying to regain Mitsui's former position as number one trading company from the present holder, Mitsubishi Corporation. Intellectually he would probably be more comfortable contemplating the intricacies of Kabuki (the classic Japanese drama to which he has been devoted since his university days) than to those of an Islamic revolution.

Mr. Yahiro was, nevertheless, a natural choice for the Iranian venture. Before becoming president of the Japanese partner in the project he had spent most of his career in the chemical and petrochemical divisions of Mitsui and its group of related companies. (His only career setback came in another trading area, rubber, where he lost money speculating in 1950.)

The Iranian project had been conceived in 1969, three years before Mr. Yahiro became involved. Iran wanted to industrialise by making use of the associated gas being burned off at its oil-fields. The Japanese wanted to win a concession to explore for oil in the south-western Iranian desert of Lorestan.

According to Mr. Yahiro, the Japanese agreed to build the complex solely to win the concession. Unfortunately, nine dry wells and tens of billions of yen later, the oil concession was declared worthless and the office closed down in 1979. Mitsui and a group of five original companies, however, were stuck with a huge project which had looked viable while the Shah was in power but became increasingly problematical under Ayotollah Khomeini.

Mr. Yahiro has had to steer a very narrow course in keeping the project from collapsing altogether. Last autumn, when the cost of construction had to be revised upwards, he persuaded the Japanese Government to take an equity share, while increasing his own company's exposure and bringing in additional partners from the private sector. The complex, now 85 per cent complete, has been "exempted" from the U.S.-inspired sanctions against Iran, but little or no work has actually been done on the project since March last year, and Mitsui is having problems getting operations restarted.

Mr. Toshikuni Yahiro

Conditions

"We can't give up," Yahiro says. Completion, however, has been made all the more difficult by the latest conditions set by Iran, which include starting work simultaneously on all 13 portions of the complex (instead of one key LPG plant as Mitsui had intended). Another potentially very serious snag is the threatened non-availability of associated gas, the material which the complex was supposed to use as feedstock.

Associated gas is in short supply because it is produced as a by-product from the oil-fields where production has fallen to only 1m barrels per day (b/d) from the pre-revolutionary level of 6m. Iran wants to use naptha as a substitute feedstock but this (apart from being more costly) cannot serve as a raw material for the vitally important LPG plant. The latter was supposed to generate revenues to help in financing work on the rest of the complex, so delays here could be very serious.

Mitsui's only hope for Bandar Khomeini seems to be that the Iranians will be forced to increased oil production to about 3m b/d (which could take one or two years) to generate money for the country's badly damaged economy. Mr. Yahiro believes that the project itself is too important for Iran to be abandoned altogether (though Iranian officials have prodded Japan with threats of turning to another partner if the Japanese are not more forthcoming).

Mitsui's problems in Iran have tended to obscure the fact that the Japanese trading companies have otherwise profited handsomely from the second oil crisis. Mr. Yahiro can assure his shareholders that his company can absorb safely any possible losses from Iran, which are mostly Government-guaranteed anyway. Last year Mitsui had a 1,065 per cent jump in net profit (consolidated) to $114m and a 34.6 per cent increase in sales to $43bn.

A large part of the increase was directly related to the fact that trading companies have become important procurers of oil since the Iran crisis disrupted supplies from the majors. They now handle about 40 per cent of oil imports. It is perhaps fair to say that the success of trading companies nowadays is depenthey are in the energ trade. Mr. Yahiro agrees.

"If the priceof oil stopped going up, Mitsui could become larger than Mitsubishi Corporation." Mr. Yahiro claims, attributing the rival company's lead to the fact that Mitsubishi has the largest share of the oil business.

Mr. Yahiro knows perhaps as well as anyone in Japan what involvement with the oil-producing world can mean. like a mistake now," he concedes," but it was also the cost of winning the right to explore for oil." Mr. Yahiro believes that "to secure resources, Japan must do something reciprocal: We can no longer just pay cash and get oil." His advice to others contemplating involvement in huge petrochemical complexes in the Middle East is to "do it carefully."

R.H.

Hiroshi Anzai

MR. HIROSHI ANZAI, the 78-year-old chairman of Tokyo Gas, the world's largest privately-owned city gas company, has earned the title "Mr. Energy" in Japan. A burly ex-Judo master and golf enthusiast, Mr. Anzai helped lead the way in the early 1950s for Japan's switch from coal to oil, the fuel for Japan's economic miracle. Luckily he also had the foresight to diversify in the late 1960s away from crude oil to liquefied natural gas (LNG). Nowadays, Tokyo Gas relies on LNG for 60 per cent of its energy needs.

"I studied night and day how to introduce LNG," Mr. Anzai says. In fact Tokyo Gas learned its early LNG technology from Sir Henry Jones of Britain's Gas Council. Tokyo Gas now claims to be second to none in the delicate art of transporting and storing large quantities of the precious commodity (at minus 162 degrees C).

Arranged

Two years after becoming president of Tokyo Gas in 1967 Mr. Anzai arranged for the first import of liquefied gas from Alaska. Some 960,000 tonnes were shipped annually under a 15-year contract in specially built tankers. Today supplies of LNG to Japan have risen sixteen-fold to about 15.7m tonnes a year under long-term contracts with Brunei, Abu Dhabi and Indonesia. Japan already accounts for 50 per cent of total world trade in LNG. A Government advisory committee says demand will double again in five years and reach 50m tonnes in 1995.

"LNG will fill the gap between oil and nuclear power," Mr. Anzai says. He does not think that nuclear energy will "pull its weight"—mostly for safety reasons—for some time to come. Mr. Anzai claims, however, that the original motivation for moving from petroleum to LNG was to reduce air pollution, not to save money. "In 1969, when I first bought LNG from Alaska, some people in the Government criticised us because it was 30 per cent more expensive than oil," he recalls. LNG has since risen ten-fold in price, but the per thermal unit cost at present is about the same as oil entering the country.

Mr. Anzai's deep involvement in procuring natural gas "for future generations," as he likes to put it, has put him in the centre of a major political dilemma, since 1972, Mr. Anzai has been the major Japanese negotiator in the tripartite Japan-Soviet-U.S. discussions on Siberian natural gas development, known as the Yakutia project, this is perhaps the most ambitious of the planned Siberian joint resource development projects, and in view of how much LNG Japan expects to get the most important.

Much to Mr. Anzai's dismay the project has been delayed (if not endangered) by the U.S. reaction to the Soviet invasion of Afghanistan. In fact Mr. Anzai now wishes that the project had remained in Soviet and Japanese hands only. The U.S. joined after the Russians agreed to a call for co-operation from President Nixon back in the heyday of big power detente.

Mr. Hiroshi Anzai

The Siberian project hit its latest snag in June when the Soviet side failed to hold a meeting in Leningrad to present a progress report on reserves at the Yakutia site. The Russians must confirm that the reserves are at least 1,000bn cu metres before further commitments are made by the U.S. and Japanese partners (824bn cu metres have been confirmed so far). If the scheme eventually goes ahead the Soviet Union would for 25 years be obliged to ship 10m cu metres of gas annually to the U.S. and the same amount to Japan. A total annual production of 32m cu metres will be needed if local Soviet demand is to be met as well.

The Japanese and Americans have already extended about $50m in loans for the initial stages of the project, but the eventual costs, including those for the liquefication plant, port and 1,700 km of pipelines, will be in the billions. This seems a lot of money but the attraction of a geographically close source of LNG could make it worthwhile for Japan. Mr. Anzai estimates that in theory Yakutia could meet all the LNG needs of Japan's 252 gas service companies.

Projects

Meanwhile, Japan can expect to receive 6m tonnes of Malaysian LNG from 1983 onwards. New Indonesian projects (about 5m tonnes a year) will come on stream in 1985 followed by Australia in 1986 (6m tonnes). Japan is awaiting a decision from Qatar on a 20-year project to start in 1988. The Russian LNG is scheduled from 1985.

Mr. Anzai is hopeful that the U.S.-Soviet political differences will not interfere with his "purely economic" aim of co-operating wtih the Russians on energy. As one of the chief private representatives of Japan in Soviet-Japan economic discussions he has had to do more than his share of leaning toward the Soviet bear, while others in Japan perform the more popular functions of "leaning" towards China.

Not many people would envy Mr. Anzai his current role, but with 52 years in the energy busines and an eighth degree black belt in Judo, he obviously knows how to roll with the blows.

R.H.

Sohei Mizuno

MR. SOHEI MIZUNO had a direct hand in two of the most important steps taken by Japan in the energy field after World War II. He attended, in a junior position, the first high level business discussions on the introduction of nuclear power into "nuclear allergic" Japan, and he was among the original few who thought that a Japanese company could win a Middle East oil concession in competition with the West, the latter idea developed into the Arabian Oil Company, of which Mr. Mizuno is now chairman. Arabian Oil is Japan's only major producer of oil overseas.

Now 57, Mr. Mizuno has moved among the most powerful business and political circles in Japan almost from the time he left Hokkaido University, where he studied biology. His first job was as personal secretary to Mr. H. Kobayashi, one of the best-known post-war Japanese business leaders. It was in this capacity that he took part in the first two secret meetings on nuclear power held in 1952.

The discussions were suspended temporarily because of fears that the public would get wind of them. Four years later, however, Japan was bold enough to send a mission to the U.S. and Europe to study nuclear power. Mr. Mizuno, as a result of his early experience, was part of this group.

The mission eventually recommended the purchase of a "Calder Hall" type gas-cooled nuclear power plant from the UK (Japan's first and last British reactor). The decision went against the better judgment of Mr. Mizuno who felt Japan would be better off devoting its meagre resources to more basic research. The trip, however, put him in touch with some Japanese businessmen in Europe who sensed a chance to move into the Middle East oil business.

Mr. Sohei Mizuno

The idea that Japan, just back on the road to economic recovery, could nudge its way into a Middle East oil concession might have been absurd but for the fact that the Arab oil producers were showing the first signs of becoming disenchanted with the West. Mr. Mizuno and a handful of others perceived that the Arab leaders, distressed at such Anglo-French adventures such as the Suez incident, might welcome a non-Western involvement.

The opportunity came when word of troubles in negotiating a French concession from Saudi Arabia reached Japanese ears. Mr. Mizano, by his own account, acted as a go-between in the complicated (and nearly unsuccessful) manoeuvrings which led to the formation of Arabian Oil Company in 1958, with Saudi Arabia and Kuwait as partners.

"Considering the boom in interest in oil exploration in the past six or seven years, that period seems like a dream now," recalls Mr. Mizuno.

Obstacles

The obstacles to be overcome included a public denunciation of the project by the then Finance Minister who warned Japanese banks not to support the venture; reluctance on the part of investors to put up money (even after the Cabinet finally gave its stamp of approval in 1957); and the fact that the company had enough funds to drill only two wells in the offshore concession it won (between Saudi Arabia and Kuwait).

The Finance Ministry objection to the project could have killed it from the start, given the fact that Japan's foreign exchange law theoretically banned the transfer of capital needed to win a 6,000 square mile concession from the Saudis. This did not prevent the colourful main character in negotiating the deal, Mr. Taro Yamashita, from ingeniously effecting the transfer. The concession was finally secured in 1957 after a group of influential politicians had induced the Cabinet to grant approval.

The venture paid off. Luckily, one of the first two wells struck oil, opening up the offshore Khaji Oil field. However, Arabian Oil still produces only a small amount of oil compared with Japan's total needs (it lifts 400,000 barrels per day, three fourths of which goes to Japan). The handful of Japanese companies that are involved in oil production together account for less than a tenth of Japan's oil imports.

Moreover, Arabian Oil has not been immune from gradual takeover by Kuwait and Saudi Arabia since OPEC finally asserted itself in the early 1970s. The company still turns in a healthy net profit, but this is after 99 per cent of its revenues are taken by the producing countries in the form of taxes. The company does not rule out being taken over completely in the long run.

Arabian Oil remain the most important single investment that Japan has made to date in Saudi Arabia, and is certainly one of the most important channels of communication between the two countries. This says a lot for the foresight and initiative of the men who brought the company into existence. Depressingly, it also highlights how little Japan has done until recently to build up contacts between itself and the Arab world.

R.H.

Ryukichi Imai

JOB-HOPPING IS not a Japanese practice but it is what *Dr. Ryukichi Imai will be doing* next month when he leaves his post as general manager for engineering at the Japan Atomic Power Company (JAPCO) in order to become Japanese Ambassador to Kuwait.

Actually Mr. Imai has spent quite a large part of his career hopping jobs as well as academic disciplines. He studied mathematics at Tokyo University before taking three post-graduate degrees in three successive *years* at three different American universities (in political science, law and international relations).

With his American training behind him Mr. Imai joined the Asahi Shimbun, one of Japan's leading daily newspapers, as its specialist on nuclear power, but that job only lasted two years. He moved to JAPCO after his increasingly pertinent criticisms of that company's attempts to negotiate the purchase of Japan's first nuclear reactor (from the UK) convinced the JAPCO management that it would "better to have me on the inside than the outside."

Looking back on his days at the Asahi, Mr. Imai says that he made a mistake in opting for journalism: "I have to be a part of the action," he says. But the need to write has not left him completely. For the past decade or so he has been *turning out* books either on his own or in co-operation with others at the rate of about one every two years. Most of the titles relate to nuclear power but Mr. Imai says he has written about the military situation in the Middle East under a pseudonym. "Being a scientist I can understand the basic facts of the military balance better than most people . . . for example I know just how much oil the Warsaw Pact would need to go to war."

Mr. Imai will not be the first non-diplomat to take up an ambassadorial post for Japan, but at 51 he probably will be the youngest to do so since the war. "Officially I don't know who picked me for the job," he says. But his extensive contacts in the academic world won him the acquaintance some years ago of the distinguished economist Dr. Saburo Okita, who last October became Japanese Foreign Minister.

His nuclear expertise has involved him with politicians and bureaucrats in other important ways. "I was behind the Carter-Fukuda confrontation of 1977," he says, alluding to the tense period in U.S.-Japanese relations when the Carter Administration's fears about the military implications of nuclear fuel recycling *threatened to put a spanner in* the works of Japan's nuclear development programme—but didn't thanks to some dextrous behind-the-scenes negotiations. Mr. Imai's willingness to switch from nuclear to Middle Eastern diplomacy derives from an interest in people and a conviction that the future of nuclear power cannot be understood without a grasp of energy problems as a whole. "Energy means oil and you can't hope to understand what is going on in the oil world unless *you have* some insight into Islam and the Arabs."

Thinking

Mr. Imai's thinking on what Japan can do to cement its ties with the Arab world would appear to put him one jump ahead of the Japanese politicians who made hurried tours of the region after the 1973 oil crisis offering cement factories or petrochemical complexes in return for guaranteed supplies of oil. "People tend to assume that we are doing the Arabs a favour by offering them hardware," he says, "but it can just as easily be argued that they are doing us a good turn by becoming our customers. In any case I feel that experience may be the most valuable thing Japan has to offer. We have *had the experience* of building our economy up from scratch since the war and of adapting and improving technology developed by others. The Middle East is at a stage where it needs to learn to do just this."

Taking his argument a stage further Mr. Imai says that Japan's course of development as a "non-military" State (i.e., a state which is relatively lacking in conventional military equipment) could offer some useful lessons to newly emerging countries. His point is not that the Middle East (or other newly developing regions) should ignore the military facts of life but rather that Japan's experience suggests a broader definition of what constitutes a military capability.

"Nowadays possessing a certain number of F-15s may be less important to a nation than having a broad technological base—for example, technologies related to water could be of vital military importance in the Middle East," Mr. Imai theorises. Japan will certainly develop technologies with a military as well as civilian "potential" and will have to decide on what terms, if any, to make these available to developing countries.

Mr. Ryukichi Imai

Mr. Imai says he hopes to stay in diplomacy at least for a while after making the switch from nuclear engineering. "I would like to think that they had more than one role in mind when they picked someone so young for the post of ambassador." If his new career fails to "catch on" he will at least have acquired a valuable new insight into the energy problems that are his major professional interest. But the chances are that this time the switch may be more permanent.

C.S.

Shuichi Ishibashi

SHUICHI ISHIBASHI is a small, cheerful man who *graduated from the mechanical* engineering department of Kyushu University and has spent most of his career working for Kyushu Electric Power Company, the private enterprise utility which supplies power to the southern main island of Japan. That may not make him sound particularly remarkable, but there is something about both Mr. Ishibashi and the company of which he is now vice-president that has brought streams of foreign *visitors to Kyushu Electric's* headquarters in Fukuoka.

Kyushu Electric operates the largest, and in one important respect most advanced, geothermal power station in Japan—the Hatchobaru station which generates 50,000 kW of electricity from steam heated by volcanic magma. Hatchobaru uses a unique "double flash" system for segerating and concentrating the steam which was developed *jointly by* Kyushu Electric and Mitsubishi Heavy Industries and which is now being sold to many other countries lucky enough to have heat trapped under the ground.

More interesting still, there could, according to Mr. Ishibashi, be a lot more Hatchobarus in Kyushu before long if the Government takes the right steps to promote development. Mr. Ishibashi says Kyushu's geothermal power resources have been estimated at up to 10m kW of "recoverable" power if the fairly shallow hot water reservoirs *whose existence has been* confirmed today are tapped. Kyushu Electrics present power generating capacity is about 8m KW—so geothermal power, in theory at least, has a good deal to offer.

Geothermal power is good, as Mr. Ishibashi sees it, because the energy itself costs nothing—at least so long as it is developed by the power generating company. All that has to be done is to sink wells into the ground and pipe the steam from them straight into turbines. The cost of electricity *from such a system* works out at about 10 yen per kWh—half the cost of electricity from oil powered thermal power stations and with nearly the entire bill accounted for by the capital write-off cost of the power station itself.

This beautifully simple receipe for obtaining cheap trouble-free power turns out on closer investigation, however, to have some snags. A major problem is that nearly all the geothermal heat in Japan happens to be located in Environmental Protection —? *national* parks which the Environmental Protection Agency does not want to see disfigured by a proliferation of power stations. A second problem is that some trouble-some chemicals (including arsenic) come out with the water and have to be disposed off, normally by pumping back into the underground reservoirs, which costs money. Finally there is the unresolved question of just who is sup-

Mr. Shuichi Ishibashi

posed to be *drilling for* steam in Japan and on what terms they can sell it to others.

Mr. Ishibashi says that Kyushu *Electric prefers* the "through process" system of geothermal development which basically means that the utility company *does everything itself* from drilling for steam in the first place to building and operating the power station. He admits, however, that the Government is "leaning" on his company to buy steam from independent developers so as to speed up the pace of development. Kyushu is at the moment studying how to do this: for example, whether to base payment on the flow of steam or on the electricity generated from it.

Meanwhile it is facing awk*ward problems with several* "outsiders" such as the Idemitsu Oil Company which have started drilling in promising parts of the island where Kyushu also plans to drill. "We are afraid that steam may start to be developed in the same way as oil," says Ishibashi. In other words a few powerful companies may get their hands on the resources and make the utility companies pay through the nose.

A technical difficulty about geothermal energy is that power stations using it have to be small (about one-tenth the size of conventional thermal power stations) because steam pressures from the reservoirs is low. This situation could change radically, however, if deeper reservoirs (at say 3,000 to 4,000 metres) were to be located in Kyushu. Electric itself is officially not in the know about the existence of such reservoirs, currently the subject of research by a Government agency. The fact that it is just about to put in an order for a new drilling rig with a 4,000-*metre range* suggests, however, that it has a shrewed idea that deeper reserves are waiting to be found.

Geothermal energy is not the only intriguing new kind of energy with which Kyushu Electric has been experimenting. Because its territory includes a large number of tiny offshore islands with small (and under resent circumstances) uneconomic power requirements, the company is doing experiments with wind power, fuel cells, and Ocean Thermal Energy Conversion (meaning the use of different water temperatures on the surface and in the depths of the ocean to generate power).

An Ocean Thermal pilot plant may go into action soon at Tokunoshima, the southernmost island in the Kyushi group and not far from where the James Bond film "You Only Live Twice," was shot. Pending the success of this project Kyushu Electric has to spend *twice* as much on generating power for its customers on the small islands as it does for others.

Kyushu Electric is by no means the largest of Japan's nine electric power companies (Tokyo Electric for example is three times the size) but it has a remarkable number of firsts to its credit—including that of having operated its one and only nuclear power station at the (then) highest ratio of capacity ever achieved by a light water reactor. The feat was achieved by two technical innovations which the company *dreamt up in its own laboratories* and then had tested by Japanese heavy machinery manufacturers including Mitsubishi Heavy Industries.

Mr. Ishibashi says nuclear power will take up most of the slack as Kyushu Electric steadily reduces it dependence on oil throughout the 1980s. In the long term, however, Japan's "homegrown" geothermal energy should come into its own.

C.S.

Shizuo Asada

MR. SHIZUO ASADA, president of *Japan Air Lines*, is a silver-haired former bureacrat. He spent most of the 1950s laying the foundations for the remarkable expansion of Japan's merchant navy and most of the 1960s helping JAL to become approximately number three in the world.

Since 1971 (when Asada became JAL president) he *has* had a different problem on his plate. JAL's profits took a plunge after the first oil crisis when its fuel bill doubled in 12 months. The airline made an *impressive comeback after* an Asada-inspired reconstruction programme had been implemented, but by the end of 1978 the same problem cropped up again. JAL's fuel bill jumped from Y49bn (£97m) in 1978 to Y107bn (£212m) last year and to an estimated Y171bn (£339m) in 1980. As a ratio of total costs, fuel was 8.6 per cent in 1972. In 1980 it will be 33 per cent.

The one thing that JAL *cannot* do about its fuel problem, Asada says, is to stop using oil. Airlines will be "oil guzzlers" long after other industries have switched to other forms of energy. Short of switching fuels, JAL has tried practically every conceivable method of cushioning the effect of the oil crisis.

Among a long list of schemes this year (which between them should cut fuel consumption by 10 per cent) Asada lists "big" measures like computerised flight control (which ensures that pilots fly the most economical routes and altitudes) and "small" ones like printing the JAL flight magazines on lighter paper (an estimated fuel cost saving of \$60,000 per year).

Realistic

Asada is realistic enough to admit that cutting fuel consumption in 1980 will not be the end of the story. There will be no ceiling on oil prices or on the ratio of an airline's costs which could be accounted for by fuel (a 40 per cent ratio is perfectly conceivable Asada says). But aviation is a young industry and must have a future whatever happens to oil. Asada remains supremely confident that he can pilot his airline through this crisis and the next one no matter how steep the price rises that have to be faced.

Asked how JAL's efforts to deal with energy problems compare with those of other airlines, Asada says that "while we may not be number one, we must be somewhere fairly near the top." JAL's yield in terms of available tonne-kilometres per gallon of fuel has risen by 24 per cent on international routes over the past seven years, and by an im*pressive 40 per cent on routes* inside Japan.

One of the reasons why its domestic yields have grown so fast is that JAL is the only airline in the world to fly short-range Boeing 747s with 550 seats. The 422 all-economy seat configuration on the JAL jumbos which fly from Tokyo to Honolulu is also a record (for international routes) and one, Asada claims, that has been achieved at no cost in passenger comfort. "Our engineers remodelled the seats on the 747 so skilfully that you could never notice the difference."

Asada sounds *calm* and confident when he discusses the immense practical difficulties facing his industry as a result of higher oil prices, but less so when the conversation turns to international aviation politics. He says that U.S. policies of laissez-faire have helped to create "miserable load factors" that are a "waste of energy" for the airlines concerned. He finds it particularly unreasonable that Japan should submit to U.S. air fare policies as a *precondition for obtaining con*cession on the Pacific routes linking Japan with the U.S. "There's an imbalance already in the Pacific so they have no right to demand conditions from us. The de-regulation of aviation policy advocated by President Carter sounds beautiful in theory mut it is simplistic to try to impose one's policy on others."

Asada admits that his career as a bureaucrat looking after the shipping industry may have marked his attitudes towards aviation. Aviation, he says, is the daughter industry of shipping and will ultimately prosper if the same principles are applied to its management. To Asada this means co-operation rather than cut-throat competition—especially at a time when energy problems are making life more difficult for everyone.

Mr. Shizuo Asada

C.S.

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The Gordian Knot of the rates

BY ROBIN PAULEY AND ANATOLE KALETSKY

THERE IS only one day each year when Britain's body politic shows any interest in the doings of 3m people who provide their most essential services, organise their children's education and spend over one-eighth of the nation's income. That is the day early in April when the bill for local authority rates arrives. Calls go out in local newspapers for cuts in bureaucracy and waste, there are exposés of the venality of local councillors and cries of outrage about the inequity of the rating system.

But the furious passions which the rates arouse are as ephemeral as they are powerful, so that the many proposals for reforming local government finance have invariably been bundled up in miles of red tape and ignored by politicians, officials and the public at large.

Confidential

However, the Department of Environment's own confidential report on abolishing the rating system could have more lasting consequences than any of the earlier proposals for reform. For there are two new factors to counteract the paradoxical and debilitating combination of apathy and undirected fury that is the British public's stock response to local government issues.

The first is the Government's somewhat rash manifesto commitment to abolish rates as soon as the success of its other fiscal and monetary policies allows. At recent Conservative conferences Ministers have been noticeably taken aback at the seriousness with which party activists, some of whom see rates as a sort of covert wealth tax, are clinging to this promise.

Secondly, there is the muddle and embarrassment which the Government has brought upon itself with the Local Government and Planning Bill. This received its final reading in the House of Commons last week, but still has obstacles to surmount in the Lords. Although it rarely made the headlines, the Bill has caused Ministers more headaches than any other piece of legislation this session. The Government's intention, to increase its control of local spending, has flown in the race of many Conservative stalwarts' faith in local government and decentralisation.

The two features are really inseparable because of the popular judgment that the rating system is far more inequitable and onerous than central government taxation, based on income and expenditure, and so makes local authorities inevitably rely on central government grants for a very high proportion of their spending — about 50 per cent total expenditure. But the great disparity between local spending and local revenues underlines the suspicion in Whitehall that councils cannot be trusted to control their spending responsibly and also accounts for the relative lack of interest among electors in local politics.

If councils had to raise much more of their money locally their fiscal demands would make a greater impression on local electors. The link between local spending decisions and their costs would become crystal clear and local residents would have strong incentives to control their councillors' spending decisions.

An alternative approach to the problem of "accountability" would be to remove the financing of certain nationwide services from the local authorities. Education, for example, accounts for half of all local expenditure. Handing over its financing directly to central government would be highly controversial, but would leave many authorities able to pay for all their other services exclusively from local revenues.

Advocates of local autonomy would like to see a decision to modify the present rating system rather than abolish it and to supplement rates with other local taxes, such as the income and expenditure taxes which the DoE committee have put forward. These extra revenues could then replace much of the Rate Support Grant (RSG) and enable the Government to cut national taxes. It is possible that some such scheme may be put to electors in the next General Election.

In the meantime the new RSG arrangements contained in the Local Government Bill will give the Government plenty of headaches in its dealings with Labour and Conservative councils alike. For the Bill addressed only the symptoms of the unsatisfactory relationship between local and national governments.

A growing number of officials now admit privately that more detailed consideration might have resulted in a different alternative to RSG

The old Rate Support Grant consisted of three components the most important of which will now be combined into a new "block grant." Under the present system the "resources element" is designed to compensate for differences between authorities in their rateable value per head of population. But it is a poor indicator of resources or taxable capacity and does not fully equalise between local authorities.

The "needs element" attempts to compensate for demographic and social disparities between authorities. Otherwise they would have to spend vastly different amounts to provide the same level of service. It does this by using a hideously complicated formula, which assesses spending needs based on past expenditure patterns. This has been widely criticised and the formula is not helped by the fact that much of the data used is old and unreliable, making a complex calculation extremely precarious.

The Government's proposals for reform fulfil the aim of tightening control over local government finance. But an important book* by Tyrrell Burgess and Tony Travers published this week, and reflecting the views of many supporters of local government, makes it clear that the proposals outlined in the Government's Bill are riddled with technical problems and claims that they will undermine the whole system of local autonomy which still exists in Britain.

Under the new plan the Government will now assess what it thinks each of the 457 local authorities in England and Wales needs to spend. Then a rate poundage will be levied which will be the same for every authority and would raise different amounts depending on each authority's rateable value.

The problem with the proposed block grant is that although it appears to be eminently desirable in principle, it has been very difficult to establish in detail. Burgess and Travers have put forward detailed reasons why the block grant system will not work in the way that has been anticipated. Although civil servants at both the Treasury and Environment Department disagree with the strength of the argument against block grant, a growing number now admit privately that more detailed consideration might have resulted in a different alternative to Rate Support Grant.

The authors show that the new system will be just as complicated as the present RSG, and that there is little chance of it being comprehensible to politicians or electors.

The book's detailed factual analysis of the present RSG system and of the alternatives is being taken very seriously in the DoE and among ministers. However its assumptions about the inviolability of local government are not fully explored or defended. The authors' own alternative is a simple per capita distribution of the RSG. Unfortunately this is not dealt with in the same depth as the criticisms of other schemes, introducing a somewhat asymmetric relationship into the argument.

The authors show that a population-based distribution would give results surprisingly similar to the present arcane methods and suggest that it would give central government enough control of aggregate local spending while inhibiting interference in the affairs of individual authorities.

The Treasury and Environment Department, however, are unhappy about population and per capita-based schemes because they detract from the central importance which the Government attaches to trying to find a scheme which, above all, equalises between authorities, i.e. tries to be fair. Burgess and Travers say this philosophy has gone badly wrong because of the confusion over equity, equality and equalisation.

Equity between individual ratepayers and residents within an authority and in different authorities does not necessarily require equality in the standards of services and rate payments and certainly does not require equalisation between different authorities which may have no bearing on the treatment of individuals within authorities. The main cause of apparent inequality between authorities is not their residents' relative incomes, but their rateable values.

One of the main political objections to rates is that they are so "visible," since the rate demand comes as one lump sum every year. The DoE working group examining alternatives sought less visible taxes, but found that this criterion conflicted with another requirement—"accountability"—which would ensure that local residents could see the connection between their taxes and councillors' decisions.

Alternative

In considering an alternative to domestic rates the main options looked at by the Environment Department working group were:—

- assigned revenues from national taxation.
- local indirect taxes on expenditure
- local taxes on commerce and industry
- local taxes on personal incomes
- low-yielding revenue sources

The working group is thought to have favoured two—either a sales tax as a local indirect tax on expenditure or some form of local tax on personal incomes.

A local variable sales tax, similar to that proposed by the Layfield Committee on local Government finance† in 1976, is probably the main option. It would easily raise a substantial amount of money. Layfield pointed out that as most shopping is done within the local authority area where people live, a local sales tax has the merit that most of the tax would be paid by local residents.

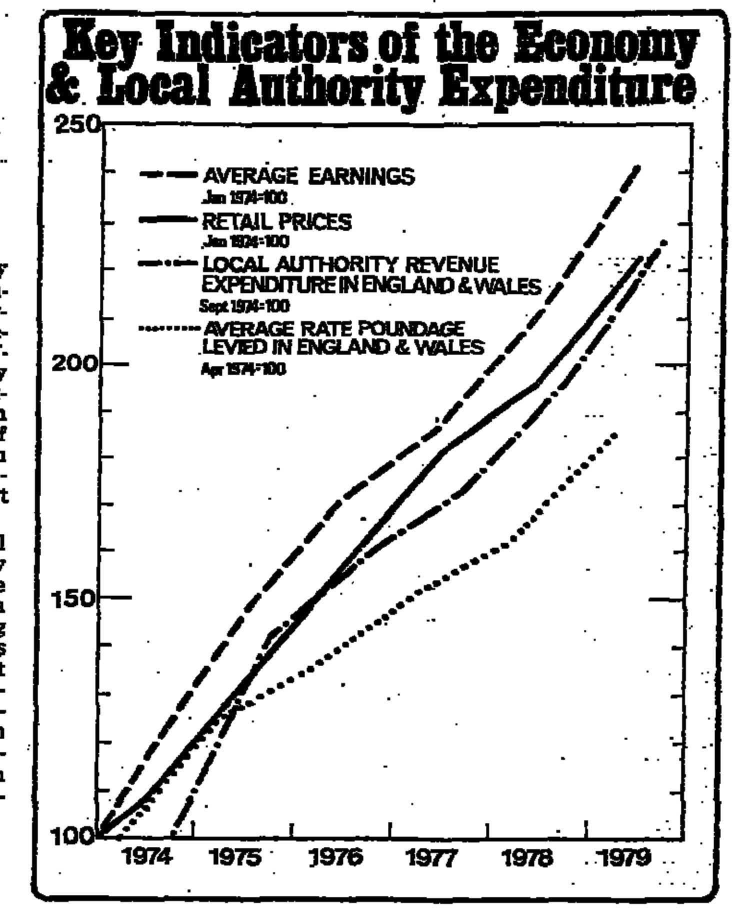
But Layfield thought a sales tax would be too difficult to operate and that it failed to meet the test of local accountability. Its administration would be complex, particularly if levied in addition to VAT. Depending on the scale and scope of exemptions it would mean annual assessments of between 500,000 and 1m tax returns from traders.

The other favoured alternative, also considered and deemed the best by Layfield, is a local income tax on personal income. Small percentages of income tax revenues could give local authorities large revenues. The tax rate would be set by the local authority and so would vary from area to area. The Government could reduce national taxes to maintain the level of the overall tax burden.

Layfield concluded on this issue that "the only way to sustain a vital local democracy is to enlarge the share of local taxation and thereby make councillors more directly accountable. The administrative cost of introducing a local tax would be justified. After many decades of uncertainty the time has come for choice on the issue of responsibility." Layfield's time has come and gone. But before the next General Election the time may come again for a decision by the Government.

** Ten Billion Pounds, by Tyrrell Burgess and Tony Travers: Grant McIntyre: £4.95*

†Layfield Committee of Inquiry into Local Government Finance 1976: Cmnd. 6453: HMSO £5.75



Letters to the Editor

Investment in transport

From the Director British Road Federation.

Sir,—Two years ago, the chairmen of British Rail and of the British Road Federation were joint signatories of a letter to this newspaper which made a plea for greater transport investment resources. That letter concluded: "The transport industry must be seen as a whole, vital to the nation's industrial development. In writing this letter together, we want to demonstrate our paramount and shared concern, steel and rubber wheel within the industry. We are not simply concerned with our comparative claims on resources within the industry, but with decisions on investment strategy to provide the right framework for each transport mode to make the most of what it can offer."

It is odd then that BR should feel it appropriate to claim that rail investment is unfairly treated in comparison with road (advertisement July 17). The fact is that in the last five years, trunk road investment has been reduced by no less than 40 per cent, while rail investment has declined by just 18 per cent. Indeed investment in rail is running at three quarters of the level of the trunk road construction budget. Yet rail is responsible for less than 1 in 14 passenger miles and one in six freight ton miles moved. This is hardly undervaluing the railway.

Road users need have no fear that were all transport projects "assessed on their relative merits and subjected to the same kind of tests," this would result in cancellation of the M25 in favour of four high speed trains as BR suggests. With predicted traffic of 80,000 vehicles daily, each mile of the M25 when complete will carry well over 100,000 passengers and 200,000 tons of freight. As this is over five per cent of the total daily traffic carried on the whole of the BR network it is doubtful—to say the least—that in transport terms four high speed trains or 28 miles of electrified route represent better value.

And on electrification, it should be noted that the BR chairman himself said "rules for investment appraisal create problems for railway electrification schemes in that the massive initial costs in the early years outweigh the discounted values of the benefits in the succeeding years." Given economic stringency it is hardly surprising that loss making projects should be deferred when there are many profitable investments which are being put back—not least, important industrial road links and by-passes.

This surely is the nub of the BR complaint. Public capital investment has been cut back much too severely overall—all shades of the political spectrum agree on that. If economic prosperity is ever to be regained, our capital base must be protected and improved. Recovery will not be achieved by public sniping (at public expense) by BR at the road budget, already much too low on any criteria—economic, social, safety, environmental or international.

R. H. Phillipson.
British Road Federation,
388-396, Oxford Street, W1.

Glorious gardener

From the chairman, Consolidated Metal Co.

Sir,—When Mr. Penn of Brussels suggests (July 15) that Robin Lane Fox is "chauvinistic . . . Little Englander . . . stupidly insular . . . anti-Europe . . . myopic" etc. I feel that he has picked the wrong laddie.

I do not happen to be personally acquainted with Robin Lane Fox and he hardly needs me to defend him, but having so much enjoyed his writings over the years I would like to point out that he is familiar with the gardens Mr. Penn refers to and I would bet a pound to a penny that he has also visited the Generalife gardens in the Alhambra. What Mr. Penn might not know is that Robin Lane Fox followed most of Alexander the Great's routes from Macedonia to Persia to India to Egypt and then produced the widely acclaimed history of Alexander. He is also a well known book reviewer, won the gold medal for garden design at Chelsea Flower Show a few years ago, paddled around the Arctic seas in his student days, is a Fellow of a famous Oxford College and is still not 35!

If that's the new breed of "Little Englanders," I take off mon chapeau to them! In short, Mr. Penn doesn't know what he is talking about!

Charles MacKinnon,
Steelbrite Works,
111 Carpenters Road, E15.

Higher status for engineers

From Mr. L. Crystal.

Sir,—Apropos the Lombard article by Hazel Duffy (July 17) the answer to the problem of higher status for engineers is simple. Restrict the term "engineer" to persons qualified by university education and/or membership of one of the present institutions which prescribe the regulations governing the term "chartered engineer."

Prohibit the use of the word "engineering" in company titles or names unless at least 50 per cent of the directors and at least 65 per cent of the staff of the company are chartered engineers.

The Press and other media should stop using the term "engineer" when referring to trades unionists and others involved in the engineering industry, unless specifically related to chartered (ie professional) engineers.

Chartered engineers themselves should stop qualifying their own title. We do not expect to see conveyancing solicitor, contracts solicitor, wills solicitor, etc., so why gas engineer, chemical engineer, automobile engineer, etc?

L. Crystal,
Seltrust Engineering,
Fleet House,
57-61, Clerkenwell Road, EC1.

Life is 6–5 against

From Mr. A. Guest.

Sir,—Professor Harold Edey, in his third paragraph of the letter printed by you on July 9, is precisely, but entirely theoretically, correct.

An old textile machine may or may not, as a matter of fact, be more efficient from the operating, maintaining and reconditioning point of view. Whether it is so or not depends upon the relative factors of labour, preference in skill and the cost of newly-manufactured parts, assuming that they are available and/or still currently produced. Assuming, yet again, those two relative factors, reconditioning is no problem at all.

The cash outflow for an old textile machine, even assuming it was virtually inoperable, would be either more or less, depending on its condition and the two relative factors cited above, than the cash outflow required to service, not to say install, a new machine. The capital cost as between an old and a new machine is never zero, except in theory constructed from theoretical models, but always in fact and practice variable. The only exception to that prescription is instanced when the entrepreneur makes a practical balance through current cost accounting between obsolescence and desirability. Even supposing that he does so with an acute split-second timing depreciation, in both the old textile machine that he has as part of his capital and the new machine that he may choose for its replacement, will occur. That is because the Laws of Physics are not suspended even for professors of the subject of economics, let alone entrepreneurs.

A. J. Guest.
152B, Coldharbour Road,
Redland,
Bristol 6, Avonmouth.

Hard times and no cushions

From Mr. R. Miller

Sir,—From reading (July 16) your report of the Chancellor's speech it does appear that this Government's policy is to "persuade" some labour to move out of the manufacturing sector. For this policy to be realistic there must be sufficient demand in those other sectors to absorb those people and the economy must, therefore, be tuned accordingly.

It is so sad seeing companies which were viable and reasonably well run going out of business simply because they can no longer export due to sterling, somewhat unexpectedly given the UK's other problems, becoming a hard petro currency and by crippling high interest rates which have hit those companies which are financially structured through high gearing.

One of Britain's great strengths in the past has been its innovative ability, but industry in recent times has sadly failed to come up with sufficient money spinning ideas, or if it has, insufficient incentives have been made available for their commercial exploitation. Should not this Government be encouraging companies to tap the innovative talent we have through greatly increased spending on R and D, an item which is often the first to be cut by companies in recessionary times. New ideas which are financially viable could result in many of the skilled labourforce who would otherwise be redundant being relocated in these new ventures.

Could the Government not more openly embrace a policy of retraining workers by providing more financial and practical assistance through the provision of more facilities and trainers, so that companies which foresee the time when they will have to close can make the bitter pill of redundancy more palatable with retraining as a sweetener? Temporary employment subsidies are not really the answer, they are merely stop gap expediencies.

If this Government could show a little more sympathy in the implementation of its policy, I am sure it would have more universal backing. It is so depressing to read that the TUC is yet again declaring war as a result of the Employment Protection Bill. It, of course, has no mandate so to do from the electorate nor from its own members, but it does have enormous muscle which can only be countered if the vast majority of the public support the policies of the Government. It is much easier to vote in a Government on such a ticket before recession has come and before mass lay-offs occur. But when we are in the midst of such a policy holding a hard line can appear callous, even though right, and some tempering by showing more of a human face to the problem may be all that is needed to carry the support of the vast majority of the country.

R. H. Miller.
127 Wade's Hill,
Winchmore Hill, N21.

Competition and costs

From Mr. P. Mason

Sir,—Re the report by Elinor Goodman (July 16), Chancellor Howe argues that unit labour costs must be cut in order to make ourselves competitive abroad and that the resources should be redeployed into newer industrial activities and services.

Ninety-five per cent of my company's business is for export and for the last 18 months our prices have literally been battered to death by foreign competition. We are only too well aware of the need to reduce unit labour costs, especially in the light of continuing falling sales. Reducing labour unit costs is something which is supposed to be in our own hands but this is further aggravated by trying to reduce costs which are being forced upon us.

For instance, the bills for telephones, postage, heating/lighting, general and water rates keep coming in with no signs of any reduction in their labour unit costs. When will something be done to control the costs of these ridiculously overmanned and inefficient monopolies? Last year, in an effort to reduce costs and dependance on oil, my company changed over to gas — only to discover that this year we are faced with a 54 per cent increase in price for that commodity!

Would Chancellor Howe please tell a complete innocent what else our company must do to remain competitive in price while saddled with these burdens.

Peter W. Mason,
Baronet Motor Accessories,
126, Morville Street,
Birmingham.

Today's Events

GENERAL

UK: International Whaling Commission conference opens, Brighton (until July 26).

Confederation of British Industry statement on pay.

Manchester's policy and finance committee meets on city's cash crisis.

Sotheby's auction Charles I letters and Civil War documents.

Sir Peter Gadsden, Lord Mayor of London, attends opening of Byward public subway, EC3.

Formal turf cutting to start work on new Olympic village for paraplegic athletes, Stoke Mandeville Hospital.

Baroque opera and ballet season opens, Old Vic (until July 26).

Overseas: EEC Foreign Ministers start two-day meeting, Brussels.

EEC Fisheries Council meets, Luxembourg.

King Baudouin leads parade in Brussels to mark Belgium's "fête nationale."

Prince Charles starts four-day official visit to France to visit elements of French armed forces.

PARLIAMENTARY BUSINESS

House of Commons: Debate on Opposition motion on Government's damaging policies towards publicly owned and supported industries. Motions on Members' salaries, pensions and allowances.

House of Lords: Housing Bill report (first day). European Communities (Treaties) (supplementary revenue decision) Order.

OFFICIAL STATISTICS

New construction orders for May. June provisional figures for retail sales. Industrial and commercial companies' appropriation account, net acquisition of financial assets and net borrowing requirement (first quarter).

COMPANY MEETINGS

See Financial Diary on page 5.

COMPANY RESULTS

Final dividends: Cawdaw Industrial Holdings. Crown House. Initial Services. Siebe Gorman Holdings. **Interim dividends:** Alexanders Discount. Lambert Howarth Group. London and Lomond Investment Trust. Meggitt Holdings. **Interim figures:** West Coast and Texas Regional Investment Trust.

LUNCHTIME MUSIC, London

Piano recital by David Roddis, St. Lawrence Jewry, 1 pm.

Organ recital by John Scott, St. Michael's Cornhill, 1 pm.

Baroque music for recorders, St. Anne and St. Agnes, 1.10 pm.

UK COMPANY NEWS

Woolworth plans for bigger DIY share

F. W. Woolworth is planning to increase its share of the DIY market by more than half over the next five years through the creation of a new specialist division.

The company expects to open at least 25 out-of-town DIY stores and also to expand and modernise the space devoted to DIY in its existing outlets. The extra floor space will be achieved through the conversion of some stock room areas and through bungalow extensions behind certain stores.

In existing stores the space allocated to DIY, which includes lighting and gardening, will be increased by a quarter to around 20 per cent of the total. The proportion will vary greatly from store to store.

The new out-of-town stores should have at least 20,000 square feet of space and some will also include garden centres occupying an additional 10,000 square feet. Woolworth already claims to be by far the largest DIY retailer in the UK, with around 8 per cent of the market.

Comm. Bank of Near East improves

The directors of the Commercial Bank of the Near East say that unaudited results for the six months to June 30, 1980, show an improvement compared to those for the same period last year.

Present indications are, they say, that results for the full year to the end of December, 1980, will show a continuation of this trend.

There was a taxable surplus in 1979 of £257,000, which compared to £296,000 for the previous year.

Cadbury (Aus.) shows increase

Net profits of Cadbury Schweppes Australia rose from A$3.47m to A$4m in the first half to June 14, 1980. Turnover went ahead by 9 per cent to A$99.94m.

The rate of progress indicated by the half-year results should be maintained in the second half, says Sir Rupert Clarke, the chairman, despite competitive conditions.

The improved first-half figures follow action to improve management control and competitiveness in the confectionery division.

FT Share Information

The following securities have been added to the Share Information Service appearing in the Financial Times:

Colby Resources (Section: Mines—Miscellaneous).

Nichols (J. N.) (Vimto) (Foods).

Strata Oil (Oil and Gas).

Buyers for Fodens to meet with Receivers

BY JOHN GRIFFITHS

RECEIVERS at Fodens, the heavy truck manufacturers, are to hold meetings this week with several potential buyers.

No serious candidate has yet been identified by the receivers, Sir Kenneth Cork and Mr. Philip Livesey, of Cork Gully. The receivers have also indicated that an offer being prepared by Fodens' distributors has little chance of succeeding.

The T. J. Richardson group, of Oldbury, Birmingham, whose interests include Fodens' largest Midlands distributorship, held a meeting on Friday at which 12 other Foden distributors pledged their support for an offer proposed by Richardson. The other distributors would be offered the chance to take up minor shareholdings.

But it is clear that the receivers do not share Richardson's belief that £10m would allow them to buy Fodens' assets and put the company back on its feet.

Fodens' stock was valued at just under £5m when trading in its shares was suspended on Monday. But its assets total, according to the Receivers, about £40m. Thus any company wishing to take over the assets—which as a result of the receivership would be free of Fodens' £35m debts—would be expected to pay considerably closer to their book value than Richardson is prepared to offer.

The receivers indicated yes on Friday that they expected, instead, to be able to put all the assets into a new company and float them off to someone of substance."

Dodge, the commercial vehicles arm of Talbot, has told shop stewards at the Dunstable trucks plant that short-time working will be introduced after the annual holiday on August 11. About half the 2,400 workforce is likely to be affected. The plant, which makes a range of light and medium trucks, is not expected to lose more than one day's working a week.

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether dividends are interims or finals and the sub-divisions shown below are based mainly on last year's timetable.

TODAY

Interims—Alexanders Discount, Lambert Howarth, London and Lomond Investment Trust, Meggitt.

Finals—Cawdaw Industrial, Child Health Research Investment Trust, Crown House, Initial Services, Siebe Gorman.

FUTURE DATES

Interims:—

Automated Security ... July 24
Bullough ... July 24
Yeoman Investment Trust ... July 30

Finals:—

Howard Tenens Services ... Aug. 8
Jarvis (J.) ... July 30
Macarthys Pharmaceuticals ... July 31
Negretti and Zambra ... July 24
Provincial Cities Trust ... July 28
Rotaprint ... †Aug. 5
Wood (S. W.) ... July 23

†Amended

Sale agreed for DCM's Burbank Toys

Mr. Paul Shewell, of Coopers and Lybrand, the receiver of the failed Dunbee-Combex-Marx toy group, has started that agreement in principle had been reached for the sale of Burbank Toys of Wellingborough.

This forms part of a trio of companies which former DCM joint managing director Mr. Richard Beecham is planning to buy, backed by a consortium including UK and overseas banking interests and industrialists.

Burbank manufactures and distributes Super Hero Dolls and related products, pre-school and nursery toys, action toys and talking and non-talking soft toys. The other two companies Mr. Beecham and his associates want to buy are the Pedigree Dolls and Toys subsidiary and Combex, which makes small children's games and toy vehicles.

Earlier this month it was announced that the group's DIY subsidiary Martlet Services Group, was to be sold to a City consortium including the former management of the business headed by Mr. Basil Feldman, DCM's other joint mangaing director.

Still to be decided is the future of Hornby, whose products include car racing sets and trains.

Black Arrow held to £0.46m

Taxable profits of the Black Arrow Group, whose interests range from leasing, wholesale and retail distribution of office furniture and equipment to electronic components and electrical appliances, rose slightly in the year to March 31, 1980, from £453,190 to £458,993.

At mid-year the surplus was up by 28 per cent to £220,000, against £171,000, and the directors expected full-year figures to show an improvement over 1978-79.

But towards the end of the year general trading conditions were difficult and against this background Mr. Arnold Edwards, chairman, regards the results as satisfactory.

A final dividend of 1.6p makes 2.5p net, compared to 2.2p.

Turnover for the 12 months came to £6.74m, against £7.20m which included £974,000 from discontinued operations.

Tax was down to £52,024 (£64,218) and there was an extraordinary credit of £26,000 (£138,486).

Earnings per 50p share before the extraordinary item, are shown as 6.16p (5.89p).

Retained profits showed a rise from £1.35m to £1.62m.

Insurance interests merged

London Merchant Securities, the property and development group with insurance interests, and Eastern Produce (Holdings), the plantations company, have completed a contract for the merger of their respective insurance broking subsidiaries, Walker Frampton and Ernest Notcutt Group.

The merger was effected by the issue of shares of Ernest Notcutt Group. The net tangible asset value of the companies whose shares were acquired is approximately £540,00. Eastern Produce (Holdings) will hold a majority of shares of the merged interests through the Ernest Notcutt Group and London Merchant Securities will maintain its investment in the merged group.

Approval has been received from the Committee of Lloyd's for the merger.

Romney Trust up to £0.7m at halfway

With gross earnings up by £193,000 to £1.34m, Romney Trust, investment company, reports an increase in after tax revenue from £0.51m to £0.7m for the six months to June 30.

Taxation took £390,931 (£278,063). Expenses, interest and preference dividends accounted for £244,686 (£363,140).

The interim dividend is lifted to 1.3p (1p). Last year a total of 4.39p, including a special dividend of 0.69p, was paid on net revenue of £1.26m.

Earnings per 25p share at halfway are given as 2.49p (1.82p). Net asset value is 133.7p (122.9p).

Market value of Romney's investments at June 30 was £40.5m (£39.92m).

Robert H. Lowe up but warns on outlook

Taxable profits of clothing manufacturer Robert H. Lowe rose in the six months to May 2 by £71,544 to £303,015 on turnover up from £3.27m to £4.18m.

However, the directors warn that with the forward order position at its lowest for some years as a result of the recession, prospects for the second half are not bright.

It is inevitable, they say, that some short-time working will be necessary within certain units of the group and this in turn will affect profits for the second half.

The directors are endeavouring to pursue new business opportunities and are reluctant to make any forecast for the rest of the year.

After all charges, including tax of £158,000 (£120,500), net profits in the half year were higher at £145,015, against £110,971.

An interim dividend is effectively maintained at 0.665p. A final of 1.5125p was paid last time.

Mild winter lifts Francis Parker midway

Trading performance of Francis Parker in the first half of 1980 had been better than expected, Mr. R. K. Francis, chairman, told shareholders at the annual meeting, and had been helped by the mild winter but hampered by a wet second quarter.

He warned, however, that high interest charges had used up a disproportionate part of the improved results. The recent 1 per cent reduction in interest rates would have only a marginal effect on the full year.

Demand for raw materials was reducing, although the group was receiving more than its fair share of the available business, and order books for the block-making and pre-cast flooring companies were satisfactory.

Last year, pre-tax profits were up from £790,000 to £959,000.

Sheffield Refreshment bounces back

Despite the directors' cautious outlook at midyear when taxable profits fell from £86,420 to £75,186, Sheffield Refreshment Houses bounced back in the second six months.

For the year to March 31, 1980, there was a taxable surplus of £250,688 (£219,857) on turnover up from £1.3m to £1.42m.

A final dividend of 1.62p makes a net total of 2.32p, against 2.29p.

Tax charged rose to £129,796 (£106,426) leaving earnings per 25p share of 6.77p (6.35p).

The company operates as an hotelier, restaurateur and banqueting specialist.

SPAIN

1980 High	1980 Low		July 18 Price %
226	203	Banco Bilbao	224
258	217	Banco Central	246
220	203	Banco Exterior	210
230	200	Banco Hispano	222
137	117	Banco Ind. Cat.	130
175	141	Banco Madrid	141
282	237	Banco Santander	276
190	140	Banco Urquijo	140
238	208	Banco Vizcaya	238
215	200	Banco Zaragoza	215
106	75	Dragados	83
62	58	Espanola Zinc	59
66	53.2	Fecsa	60.5
40	23.2	Gal. Preciados	23.2
71.7	58.7	Hidrola	66
68.2	57.5	Iberduero	61.7
130	100.7	Petroleos	115
92	59	Petroliber	85
115	107	Sogefisa	107
63	51.5	Telefonica	61
67.5	58.2	Union Elect	65

BUSINESSMAN'S DIARY

UK TRADE FAIRS AND EXHIBITIONS

Date	Title	Venue
Current	Royal Tournament (01-930 6009) (Until July 26)	Earls Court
Current	Gift Fair (0282 867153) (until July 24)	Exhibition Centre, Harrogate
July 22-24	Microcomputer Show (0895 39262)	Wembley Conference Centre
Aug. 1-4	Scottish Furniture Trades Exhibition (041 649 1954)	Kelvin Hall, Glasgow
Aug. 3-7	International Gifts Fair (01-855 9201)	Olympia
Aug. 13-15	Computer Graphics Exhibition (09274 28211)	Metropole Hotel, Brighton
Aug. 14-25	Ideal Home and Leisure Exhibition (0202 20327)	Newcastle University
Aug. 17-23	British Musical Instruments Trade Fair (01-855 9201)	Olympia
Aug. 17-20	The Piano and Electronic Organ Trade Fair (01-428 1590).	The Connaught Rooms, London WC2
Aug. 20-23	Ideal Home and Trade Exhibition (06333 64538)	Leisure Centre, Pontypool
Aug. 20-25	Modern Homes Exhibition (0253 54676)	Guildhall, Preston
Aug. 23-25	Trade and Entertainments Exhibition (0689 36431)	Moat Park, Maidstone
Aug. 23-30	International Motor Cycle Exhibition (0203 27427)	Earls Court
Aug. 31-Sept. 4	Giftware and Fashion Accessories Trade Fair (08833 4371)	Bristol Exhibition Centre
Aug. 31-Sept. 4	International Watch, Jewellery and Silver Trades Fair (01-837 3636)	Earls Court

OVERSEAS TRADE FAIRS AND EXHIBITIONS

Date	Title	Venue
Current	International Photogrammetry Trade Exhibition (until July 24)	Hamburg
July 26-Aug. 3	Trade Fair	Dornbirn
Aug. 8-17	Modern Family Exhibition (02013 4450)	Hamburg
Aug. 10-14	National Hardware Show	Chicago
Aug. 11-17	International Fisheries Fair	Oslo
Aug. 19-Sept. 4	International Exhibition of Agriculture and Food Industry—OMEC	Budapest
Aug. 20-Sept. 20	International Fair	Izmir
Aug. 22-24	Wellington Home Show	Wellington, New Zealand
Aug. 23-27	World Woodworking Exposition	Atlanta
Aug. 26-29	Offshore North Sea Technological Conference and Exhibition	Stavanger
Aug. 30-Sept. 3	International Bridge and Structural Engineering Exhibition	Vienna
Sept. 4-9	Jewellery, Gold, Silver, Clocks and Gifts Exhibition—BIJORHCA	Paris
Sept. 12-21	International Autumn Fair (01-486 1951)	Zagreb
Sept. 15-Sept. 23	International Exhibition for Automobile, Motor Car Workshop, Service Station and Garage Equipment—AUTOMECHANIKA (01-734 0543)	Frankfurt

BUSINESS AND MANAGEMENT CONFERENCES

Date	Title	Venue
Current	FT Course: Financial Management for the non-financial executive (01-621 1355) (until July 25)	The City University
Current	Oyez-IBC: The Language of the Law (01-242 2481) (until July 25)	Lady Margaret Hall, Oxford
July 22-24	The Institution of Civil Engineers: Flood Studies Report—5 years On (01 222 7772)	University of Manchester
July 22-23	Online: Microelectronic Applications (09274 28211)	Wembley Conference Centre
July 22-23	University of Bradford Management Centre: The Causes and Symptoms of Company Failure (Bradford 42299)	Heaton Mount, Bradford
July 23	Bacie: Introduction to Television in Training (01-636 5351)	City University, London
July 28-Aug. 15	Compower Training School: Basic COBOL (Cannock 2511)	Cannock, Staffs.
Aug. 3-Oct. 24	Bacie: Overseas Training Officers Programme (01-636 5351)	Oxford
Aug. 4-6	MSS: Inventory Management and Control (Worthing 34755)	Worthing
Aug. 6	LCCI: Middle East and North Africa Section "At Home" (01-248 4444)	Cannon St., EC4
Aug. 7-8	British Institute of Management: Effective Speaking—Practice and Coaching using Closed Circuit TV (01-405 3456)	Parker Street, WC2
Aug. 10-24	University of Western Ontario: The 1980 International Symposium on Solar Energy Utilization	Ontario, Canada
Aug. 11-15	CCC: Practical Introduction to UK Business Law (01-222 6362)	Trinity Hall, Cambridge
Aug. 11-12	MSS: Principles of Work Study and Incentive Schemes (0903 34755)	Worthing
Aug. 11-22	CEI: International Financial Management Seminar	Geneva
Aug. 18-19	The British Institute of International and Comparative Law: Multinational Corporations and the International Law Standard (01-636 5802)	Royal Garden Hotel, W8
Aug. 26-28	FT Conference: Aerospace into the Eighties and Beyond (01-621 1355)	Royal Lancaster Hotel, W2
Aug. 28-29	BIM: Rapid and Efficient Reading (01-405 3456)	Parker Street, WC2
Sept. 1-3	Brunel Institute of Organisation and Social Studies: Understanding Production for non-production managers (0895 56461)	Uxbridge

INTERNATIONAL BONDS

BY FRANCIS GHILES

A flat feeling after the party

THE 1980 bond party is over. Investors appear to have deserted the secondary market for their holidays and only desultory activity continues in new issues.

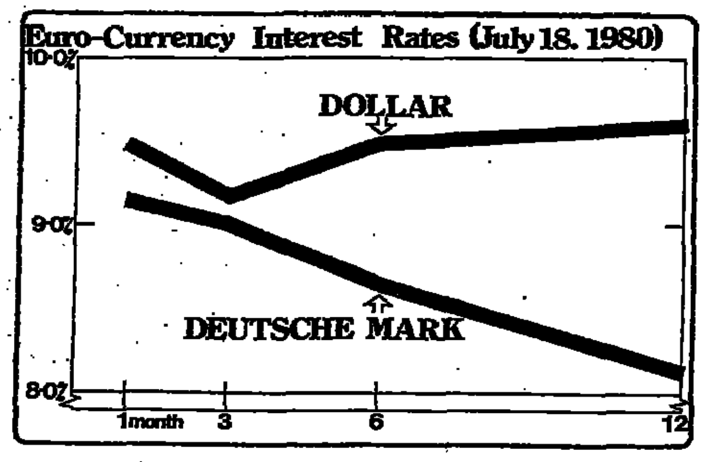
Prices of fixed interest dollar bonds drifted down by about ⅜ per cent last week in the absence of any lead from New York. The U.S. dollar strengthened a little against major currencies despite a slight easing in Eurodollar rates. The three-month rate shed ⅛ per cent to end the week at 9⅞.

New issue activity continues, however, both in the dollar and the D-Mark sectors. In the first, two new floating rate note issues were launched, the $200m issue for Barclays Bank International (BBI), being the largest Eurobond for a UK borrower. The 17 other banks, together with BBI, which are managing the issue, include a string of London merchant banks and two of the big three Swiss banks—Swiss Bank Corporation and Union Bank of Switzerland.

A notable absentee is Credit Suisse First Boston, which was included in the management group of the last FRN issue for Barclays in December 1979 but turned down the offer of a management position this time round. The reasons for its absence are believed to be linked with the level of commissions, which total 2 per cent, a figure which some market participants—though not UBS and SBC—would view as being on the tight side for a 15-year deal. CSFB may also have felt that its leading position in the FRN sector warranted a more prominent position than that of manager alongside 17 other institutions.

This is not the first time in recent weeks that CSFB has declined a management position in an issue for a prominent borrower. This happened with a £50m FRN issue for Lloyds Eurofinance earlier last month.

The return to the market of Metropolitan Estate and Property Corporation, whose issue was so well received that it was increased last week by $5m to $35m is encouraging news for other UK property companies. Kidder Peabody recalls, in its weekly telex to investors, that "only five years ago the reputation of the UK property companies had sunk to a point where it was virtually impossible to place paper, at any price. MEPC suffered the ignominy in December 1974 of seeing its 7½ per cent bonds to 1987 trade at less than half their face value."



It can be argued, the telex adds, "that the 1974 prices were only typical of the prevailing hysteria at that time." Certainly the UK institutions which bought heavily before the turnround are, in some cases, sitting on book profits which exceed 100 per cent.

The D-Mark foreign bond sector continues to absorb a very steady flow of new issues, though it would appear that domestic investors have taken over from foreign ones as the main buyers of new paper. DM 500m worth of new bonds were announced last week including a DM 250m for the EIB through Deutsche Bank, leading a domestic syndicate of banks. Terms include a coupon of 7¾ per cent which is very fine for this prolific borrower.

Honeywell Bull came to the D-Mark sector for the first time while New Zealand arranged a placement which, in effect, was a refinancing exercise. A DM 200m issue for Chile, the second ever for the republic, met with a muted response.

Domestic investors are buying foreign D-Mark bonds both because they can obtain a higher return than on domestic paper and because of a widely expected fall in D-Mark interest rates later this year.

In the Swiss franc sector, a steady flow of new issues continues with little evidence of much trading in seasoned issues. The next borrower is expected to be the Republic of Finland.

The French car company, Peugeot, is meanwhile tapping the sterling sector for a £22½m bond issue through S. G. Warburg. This is the company's second foray into the Eurobond market—it arranged a Eurofrench franc issue last year—and the funds are being used to help repay loans extended by the UK Department of Industry in 1976 to Talbot UK, formerly Chrysler UK.

CURRENT INTERNATIONAL BOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Lead manager	Offer yield %
U.S. DOLLARS							
§Paribas Suisse (Bahamas)	40.3	1990	10	6¼	100	Paribas	6.250
††§Ricoh Co.	50	1995	11¾	*	*	Morgan Stanley	*
‡§MEPC	35	1996	15¼	8¼	100	KHC, Morgan Grenfell	8.250
‡†Barclays Bank O'seas Fin. Co. NV	200	1995	13	5Φ	100	Barclays Bank Intl.	5.063Φ
‡†Bank Of Communications (Taiwan)	25	1985	5	6Φ	100	Dillon Read, Salomon Bros	6.090Φ
D-MARKS							
‡Royal Bank of Canada	100	1990	10	7¾	100	WestLB	7.750
Republic of Chile	100	1986	6	9	*	Dresdner Bank ‖	*
‡**New Zealand	50	1990	10	8	100	WestLB	8.000
‡CII-Honeywell-Bull Fin. O'seas NV (Curacao)	100	1990	10	8⅜	100	Deutsche Bank	8.375
EIB	250	1990	10	7⅞	99½	Deutsche Bank	7.949
FRENCH FRANCS							
Kingdom of Sweden	400	1985	5	12⅞	*	BNP, Caisse des Depots, PKbanken	*
SWISS FRANCS							
‡Philips NV	60	1992	—	5¼	100	SBC	5.250
‡**World Bank	150	1987	—	5⅞	100	SBC	5.875
‡†§**Japan Storage Battery	25	1985	—	4Φ	100	UBS	4.040Φ
‡§**NTN Toyo Bearing	30	1985	—	5½	100	SBC	5.500
STERLING							
Peugeot SA	22.5	1990	8.3	14	*	SG Warburg	*
LUXEMBOURG FRANCS							
‡**ECSC	250	1988	6½	12	100	Kredietbank Luxem	11.25
‡**EIB	250	1988	6	11½	100	Banque Intl. a Luxem	†11.250
GUILDERS							
**National Inv. Bank Netherlands	75	1987	7	10	100	ABN	10.000
YEN							
‡Kingdom of Sweden	15bn.	1990	8.8	8½	100	Nomura Securities	8.500

* Not yet priced. ‡ Final terms. ** Placement. † Floating rate note. Φ Minimum. § Convertible. †† Registered with U.S. Securities and Exchange Commission. ¶ Purchase Fund. ‖ Postponed.
Note: Yields are calculated on AIBD basis.

CREDITS

BY PETER MONTAGNON

Yugoslavia chases Arab money

THE National Bank of Yugoslavia is understood to have launched its large borrowing programme with a $250m credit being managed by Kuwait Foreign Trade Contracting and Investment Company. Terms have been set at eight years with three grace and a 1⅝ per cent margin.

This is the same margin as that set in June on a $107m club deal for three Yugoslav banks under the leadership of Citicorp, although the maturity of the National Bank credit is a year longer.

Bankers in London believe that the National Bank had intended to try to raise the whole $250m from Arab banks, but that the amount turned out to be too large for a restricted syndication. The credit is still expected to bear a strongly Arab flavour but international banks have been asked to participate as well.

In terms of strategy this could turn out to be a somewhat unfortunate move for Yugoslavia. Central Bankers meeting in Basle earlier this month reported that they had been asked by Yugoslavia to help negotiate loans from commercial banks in excess of $2bn to help finance the country's deteriorating balance of payments deficit.

This means that Yugoslavia will have to tap Western banks for very sizeable amounts over and above the present operation. The initial response does not seem to have been particularly favourable as these banks are sceptical of the country's economic performance besides having lending limit problems in many cases. At best it would therefore seem likely that margins for Yugoslavia will have to rise further before the borrowing programme is completed.

Among other deals it looked at the end of last week as though the jumbo credit for Venezuela would be raised substantially from the $1.2bn originally targetted. The credit is believed to have attracted some $1bn from the market on the basis of its split ⅞-¾ spread over seven years.

The absolute limit for any increase would be $1.8bn as this is the total extent of congressional authorisation for longer term Venezuelan borrowing. A final decision on the amount will be taken at a managers' meeting in London this Wednesday.

The response to the credit is especially satisfying for Venezuela in view of problems reported recently by many banks over the poor repayment performance by Venezuelan state agencies on their substantial short-term debt.

The problems reached the stage where Sr. Hernan Oyarzabal, Venezuela's Director of Public Credit, paid a special visit to Europe 10 days ago to reassure banks that action was being taken to ensure prompt servicing of the debt. The jumbo loan should help in this as its purpose is to consolidate some of the debt with a maturity of up to two years incurred by the agencies.

Brazil's telecommunications agency, Telebras, is now studying an offer for a $150m credit from five major banks: Bank of America, Canadian Imperial Bank of Commerce Credit Lyonnais, Skandinaviska Enskilda and Sumitomo Bank. The offer provides for an eight-year credit with a spread of 1⅝ per cent and four years grace.

Although no mandate has yet been formally awarded, the credit is almost certain to emerge on the terms outlined above. The spread is identical to that on Brazil's last major syndication for Eletrobras, which was raised to $410m from an initial target of $300m.

As a further indication of the interest being shown in prime quality European borrowings, the amount of the Electricite de France 10-year credit has been increased to $600m from $500m. This is a club credit over 10 years with a margin of 0.35 per cent for the first five years rising to 0.45 per cent thereafter. It was possible to increase the amount even despite the very low spreads and the complete absence of Japanese institutions from the deal. The latter were denied permission to participate by the Japanese Ministry of Finance because of the standby element to the loan. Authorisation to participate in standby credits is not normally forthcoming.

Another operation expected to attract fine terms is a DM 200m borrowing by Ireland's Industrial Credit Company. The mandate had not been formally awarded by the end of last week, but the deal is already being followed closely because of Ireland's high status as a credit risk.

U.S. BONDS

BY DAVID LASCELLES

Fed keeps the market on tenter-hooks

THE MARKET was nervous last week, trying to figure out whether the Federal Reserve had changed its position on interest rates (it thought probably not, but nobody could be sure). There was also growing concern that the U.S. economy may be pulling out of a recession before deflation has had its full impact. If so, there is a strong chance that inflation will pick up again, and interest rates too.

Bonds put on their best performance on Wednesday, when it appeared that the Fed had eased its target for the key Fed funds rate by ½ per cent to an 8-9 per cent range. The evidence for this—in the form of a Fed intervention in the money markets when rates were rising—was not conclusive, but bond prices shot up all the same.

By the end of the week, though, it was still not clear what the Fed was up to. Some analysts maintained that the central bank had moved to accommodate a market in which interest rates were heading down again anyway, but that it had done so in a deliberately muted way, so as to limit the impact on the dollar. Others were less convinced. The market itself ended up feeling neutral: bonds lost some of their gains but closed the week without much sense of direction.

Some clarification of where the Fed stands could come on Tuesday when Mr. Paul Volcker, the Federal Reserve chairman, is to testify in Congress on current credit policy. Among other things, he could indicate the Fed's targets for money supply growth and interest rates.

The market was also unsettled by mounting evidence of a turnaround in demand. The latest industrial production and gross national product figures continue to show an economy in decline. But housing, retail sales and car sales have all picked up in recent weeks—particularly in the case of housing, where the sales and starts are up by 30 per cent or more. Since these areas all led the economy into recession, it is a fair bet that they will lead it out again.

U.S. INTEREST RATES (%)

	Week to July 18	Week to July 11
3-month Treas. Bills ...	7.94	8.16
3-month CDs	8.60	8.70
Federal funds wkly av.	8.80	8.85
Treasury 30-year Bonds	10.13	10.17
Long-term AAA utility	11.25	11.38
Long-term AA indust.	11.00	11.13

Source: Salomon Bros. estimates.

FT INTERNATIONAL BOND SERVICE

U.S. DOLLAR STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Alcoa of Australia 10 89	60	92⅝	92⅞	−0⅛	−0⅞	11.40
Brit. Oxygen F. 10¾ 90	50	92¾	93¼	0	−2	11.89
CECA Grad. Rate 12 86	100	98⅛	98⅞	−0⅛	−0¼	11.56
CECA 11⅝ 90	50	99	99½	0	−0¼	11.71
CECA 11½ 88	100	100	100½	+0½	−0½	11.43
Citicorp O/S Fin. 10 86	300	95⅛	95⅝	−0½	−1¼	11.10
Con. Illinois O/S 9¾ 86	150	94	94½	−0¼	−1¼	11.12
Denmark 11¼ 90	100	98¼	98¾	−0⅛	−1⅛	11.91
Dome Petroleum 13½ 92	50	103¼	103¾	+0¼	−0½	12.88
EEC 11 95	75	95⅝	96⅛	−0¼	−0½	11.56
EIB 11⅝ 92	80	97½	98	−0⅛	−1⅛	12.09
EIB 13¾ 90	100	106⅝	107⅛	0	−0⅛	12.48
Eksportfinans 11¼ 87	50	99⅝	100⅛	−0⅛	−0⅛	11.24
Eksportfinans 9½ 87	75	92⅞	93⅛	−0¼	−1⅛	11.01
Elec. de France 10 88	125	95⅝	96⅛	−0¼	−0¼	10.79
Export Dv. Cpn. 9¾ 84	150	96⅞	97⅛	+0⅛	−0⅛	10.71
Export Dv. Cpn. 12¾ 87	100	106½	107	−0⅛	−0⅛	11.28
Export Dev. Cpn. 9½ 86	150	95⅝	96⅛	−0¼	−0⅞	10.50
Federal Dev. Bk. 12¼ 85	75	103⅝	104⅛	+0⅛	−0¼	11.14
Fin. Exp. Credit 10⅛ 85	50	98¼	98¾	0	−0⅛	10.90
Finland, Rep. of 9½ 86	100	92	92½	0	−1⅛	11.40
Ford O/S Fin. 12⅛ 85	250	99⅞	100⅜	−0⅛	−0⅛	12.56
George Weston 13½ 87	30	102¼	102¾	−0¼	−0½	12.91
GMAC O/S Fin. 11 84	100	99⅝	100⅛	0	0	11.00
GMAC O/S Fin. 13¾ 85	100	105¾	106¼	−0⅛	0	11.62
Goodyear O/S 12½ 87	75	98¾	99¼	0	−0⅛	12.71
Hudson's Bay 11½ 90	75	98	98½	−0¼	−0⅞	11.80
IBM Canada 10½ 85	50	99½	100	−0½	−0½	10.56
ICI Fin. Ned. 11 83	100	100⅛	100⅝	+0¼	−0⅛	10.76
McGraw 13½ 85	75	102⅝	103⅛	−0⅛	0	12.62
Norwest Ind. 13⅛ 87	50	101	101½	−0⅛	−0⅛	13.30
Nova Scotia 10¼ 90	50	95	95½	−0⅛	−0⅛	11.59
Pembroke Capital 9⅝ 87	100	94⅛	94⅝	0	−0¼	10.78
Pemex 11½ 88	100	97⅞	98⅜	+0⅛	−0¼	11.50
Quebec Hydro 11½ 92	100	96⅞	97⅜	−0¼	−1⅛	11.96
Roylease Ltd. 11¼ 86	50	100⅝	100⅞	−0⅛	−0¼	11.06
SNCF 12¼ 85	50	104½	105⅛	−0⅛	0	10.96
Swed. Ex. Cred. 12½ 85	40	102⅞	103⅜	0	−0½	11.59
Sweden 9¾ 84	100	96⅜	96⅞	−0⅛	−0¼	10.81
UB Finance BV 11 90	50	93¼	93¾	+0¼	−0⅞	12.16
World Bank 9¾ 85	200	96⅞	97⅜	−0⅛	−0⅞	10.52
World Bank 10⅛ 87	300	97¼	97¾	−0¼	−0¼	10.77

Average price changes... On day −0⅛ on week −0⅝.

DEUTSCHE MARK STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Akzo 9 90	125	103	103½	+0⅛	+0½	8.47
Australia 8⅛ 90	250	102¼	102¾	−0⅛	0	7.70
BFCE 7¾ 87	100	99⅝	100⅛	+0½	+0¼	7.74
BFCE 8⅛ 95	300	99¾	100¼	+0½	+0¼	8.10
Brazil 8 87	150	92⅞	93⅜	0	−1	9.35
Council of Eur. 7¾ 89	100	94⅞	95⅜	+0¼	+0¼	8.02
Denmark 7⅞ 88	100	98⅞	99⅜	+0⅛	+0¼	8.12
Denmark 8¼ 92	100	99	100	−0¼	+0¼	8.31
EEC 7⅞ 94	225	98¾	99½	+0¼	+0¼	7.97
EIB 7½ 89	200	96⅞	97½	−0¼	−0⅛	7.96
Finland Rep. of 8 88	150	98⅞	99⅜	+0¼	0	8.14
Kobe, City of 7¼ 89	150	95	95½	+0⅛	0	7.84
Kobe, City of 8 90	100	100¼	101	−0½	+0⅛	7.90
Mt. Bk. Denmark 8½ 90	150	100¼	101	+0⅛	+0⅛	8.40
Norway 7½ 85	250	99¼	100	−0⅛	−0¼	7.58
OKB 7¾ 89	100	96½	97¼	−0¼	+0⅛	7.86
OKB 8¾ 92	150	100½	101¼	+0⅛	+0⅛	8.73
Oslo, City of 8¾ 90	80	102½	103¼	+0⅛	+0⅛	8.29
Sweden 9¾ 87	200	107⅛	107⅞	+0⅛	0	8.23
World Bank 7¾ 91	400	97⅞	98⅝	−0¼	+0⅛	7.99
World Bank 7⅞ 90	250	98¾	99½	−0½	+0⅛	8.00
World Bank 10 88	150	108¾	109½	+0¼	+0⅛	7.96
World Bank 10 90	200	111¾	112½	0	+0¼	8.16

Average price changes... On day 0 on week +0⅛

SWISS FRANC STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Argentina 5½ 89	80	93½	94	−0½	+0½	6.44
Bergen, City of 4¾ 91	40	†95½	96	−0⅛	0	5.27
Bergen, City of 6 90	50	103¼	104¼	0	+0¼	5.48
BNDE 5 89	75	85¾	86½	−0¼	−0¼	7.16
BMW Overseas 4¾ 91	100	93	93½	−0½	0	5.05
Buhrm'n-Tetterode 7 90	40	106¾	107⅛	+0⅞	+1⅛	6.05
Caisse Nat. Tele. 4¾ 89	100	94½	95⅛	+0⅛	0	5.07
Copenhagen 4½ 91	60	†91	91½	0	0	5.57
Council of Eur. 5 89	100	95¾	96¼	−0⅛	+1¼	5.58
Denmark 5¾ 90	80	100	100½	0	0	5.72
EIB 4½ 91	100	92	92½	0	0	5.46
EIB 4⅞ 94	100	88¼	88¾	0	+0¼	5.57
Elec. de France 4⅞ 89	100	95	95½	+0⅛	0	5.04
F. G. H. Hypb. Bk. 6 90	50	†104	104½	0	−0⅛	5.43
GZB 4⅞ 89	100	91⅞	92⅜	−0⅛	−0⅛	5.35
Hilti 4½ 91	35	†94½	95	−0¼	+0½	4.98
Int.-Amer. Dev. 4½ 89	100	92	92½	0	+0½	5.61
Int.-Amer. Dev. 7 90	80	106½	107	0	+0¼	6.06
Jutland Tele. 5½ 90	50	100½	101	0	0	5.39
Malaysia 5 89	80	†88½	89	−0½	−0½	6.67
Newag 5¾ 90	80	102¼	102⅞	+0⅛	+0⅛	5.40
Nippon Tel. & T. 4¾ 89	100	94½	95	0	0	4.97
Nordic Bank 5 89	45	98½	99	0	+1	5.18
Norges Komm. 4⅞ 91	100	92¾	93¼	−0¼	−0¼	5.21
OKB 4¾ 91	100	92⅛	92⅝	−0⅛	+0⅛	5.29
OKB 6 90	100	103⅞	104⅜	+0⅛	+0⅛	5.44
Oslo, City of 4¾ 91	100	90	90½	0	−0½	5.56
Sekisui Prs. Hms. 6 90	90	†102⅝	103⅛	−0¼	0	5.60
Shikoku El. Pwr. 4¾ 89	100	96⅝	97⅛	0	+1	5.21
World Bank 4⅝ 89	100	96½	97	−0½	+0½	5.08
World Bank 4⅞ 89	150	91⅞	92⅜	−0⅛	−0⅛	5.49
World Bank 4⅝ 91	100	92⅞	93⅜	−0⅛	+0⅛	5.45

Average price changes On day −0⅛ on week +0⅛

YEN STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Australia 5.6 83	30	91¼	93	−0⅛	−0⅛	8.40
Australia 6¼ 88	20	87⅞	88⅜	+0⅛	+0⅛	8.67
EIB 7¾ 89	12	95⅝	96⅛	−0⅛	−1⅛	8.39
Finland 5.6 83	10	91⅞	92⅜	+0⅛	+0⅛	8.55
Finland 6.8 88	10	88⅞	89½	+0⅛	−0⅛	8.88
Finland, Rep. of 8⅛ 87	15	96½	97½	0	−0⅛	8.97

Average price changes... On day +0⅛ on week −0⅛

OTHER STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Bell Canada 10¾ 86 C$	60	95½	96¼	0	+0⅛	11.67
CIBC 13¼ 85 C$	50	103¾	104¼	0	−0¼	12.32
CIBC 11½ 85 C$	60	98¾	99¼	+0⅛	+0½	11.81
Federal Dev. 11½ 90 C$	60	96⅞	97⅜	0	−0⅛	12.01
Fst. Can. Inv. 10 84 C$	50	94	94½	0	−0⅛	11.93
GMAC 12 85 C$	50	†99¼	99¾	+0½	+0½	12.13
R. Bk. Canada 10 86 C$	40	94¾	95¼	+0⅛	+0⅛	11.20
Tordom Cpn. 13½ 85 C$	30	103½	104	0	−0¼	12.39
M. Bk. Dnmk. 9 91 EUA	25	93½	94½	−0¼	−0¼	9.89
SOFTE 8¾ 89 EUA	40	87¼	88¼	0	+0⅛	10.44
U. Bk. Nrwy. 9½ 90 EUA	18	97¾	98¾	0	−0⅛	9.77
Algemene Bk. 8¾ 84 Fl	75	96⅜	96⅞	−0⅛	+0⅞	9.25
Algemene Bk. 10¾ 87 Fl	400	100¾	101¼	0	+0¾	10.04
Ned. Gasunie 8¾ 84 Fl	50	100½	101	+0⅛	+0⅛	8.51
Ned. Middbk. 8⅞ 84 Fl	75	96¾	97¼	+0⅛	+0½	9.22
Norway 8⅛ 84 Fl	100	96¾	97¼	0	+0⅛	9.12
Philips Lamps 8¾ 84 Fl	75	96⅞	97⅜	+0⅛	+0⅛	9.22
Air France 11 84 FFr	120	96½	97	0	+0⅞	12.05
CECA 14¼ 86 FFr	150	106½	107	0	+0⅜	12.51
Euratom 9¾ 87 FFr	150	85⅝	86½	0	0	12.93
Finland 11 84 FFr	80	95⅛	95⅞	0	+0⅛	12.39
Finland 11½ 89 FFr	70	93½	94	0	+0¼	12.69
Gaz de France 11 84 FFr	150	94⅝	95⅛	0	0	12.54
IBM France 11⅞ 84 FFr	120	97⅞	98⅜	0	+0½	12.36
Renault 9¾ 85 FFr	100	86⅞	87⅜	0	−0¼	13.42
Saint-Gobain 9¾ 86 FFr	130	86⅛	86⅞	0	+0⅛	13.19
Solvay et Cie 9¾ 87 FFr	125	84⅝	85⅛	0	−0⅛	13.22
Beneficial Fin. 14¼ 90 £	20	101⅞	102⅜	+0⅛	+0⅞	13.82
Citicorp O/S 13½ 90 £	50	101⅛	101⅝	+0¼	+1½	13.20
EIB 11¼ 91 £	25	96¼	96⅞	+0½	+3	12.09
Fin. for Ind. 12½ 89 £	30	98⅛	98⅝	+0⅞	+2¼	12.81
Fin. for Ind. 14½ 88 £	20	104¼	104¾	+0⅛	+1½	13.47
Gen. Elec. Co. 12½ 89 £	50	99⅛	99⅞	+0⅛	+1½	12.54
Swed. Ex. Cr. 15¾ 85 £	20	106	106½	+0⅞	+1⅛	13.30
Banobras 8¾ 90 KD	7	†94⅞	95⅜	0	0	9.01
CCCE 8⅛ 91 KD	10	†92⅞	93⅜	0	0	9.15
Mitsubishi 7½ 84 KD	10	†94⅛	94⅞	0	+2	9.15
Sonatrach 8½ 90 KD	12	†94¼	94¾	0	0	9.37
Akzo 9⅞ 87 LuxFr.	500	94⅞	95⅝	−0⅛	−0⅛	10.21
Euratom 8 87 LuxFr	500	89½	90½	0	−0⅛	10.11
Euratom 9¾ 88 LuxFr	500	98¼	99¼	0	0	9.97
EIB 9¾ 88 LuxFr	600	97¾	98¾	−0⅛	0	10.07
Volvo 9¾ 87 LuxFr	500	96	97	−0¼	−0¼	10.43

FLOATING RATE NOTES	Spread	Bid	Offer	C.dte	C.cpn	C.yld
Allied Irish Bk. 5¾ 87	0¼	98	98½	2/1	10.44	10.62
Bank of Ireland 5¾ 89	‡0¼	98	98½	21/8	11.81	12.02
Bank of Tokyo 5¾ 89	‡0¼	97⅜	97⅞	25/10	16.56	16.97
Barclays O/S Inv. 5 90	0¼	97⅞	98⅜	13/12	9⅝	9.83
Bergen Bk. A/S 6 89	‡0¼	97	97½	29/8	10	10.28
Bilbao Int. NV 5¾ 90	0¼	96⅞	97⅜	29/11	10.06	10.35
Bque. Indo Suez 5¾ 89	0¼	98¼	98¾	11/1	9⅝	9.77
Citicorp O/S F. 83	§‡0	98⅞	99⅜	23/8	10.19	10.28
Citicorp O/S F. 84	‡0	98⅜	98⅞	30/7	9.69	9.82
C. Itoh 6¾ 87	0⅞	99½	100	18/9	19.44	19.49
Co-operative Bk. 6 86	0¼	98¼	98¾	15/11	11.44	11.61
Creditanstalt 5½ 91	§‡0¼	97	97½	14/9	9.44	9.70
CNT 5¾ 86	§0¼	100⅞	101⅜	16/10	18⅛	17.95
GZB 5½ 89	‡0¼	98⅛	98⅝	1/8	15¼	15.50
Jugobanka 8 89	0⅞	90⅛	92¼	23/11	11⅝	12.74
Ind. Bank Japan 5¾ 87	0¼	100⅛	100⅝	15/10	18⅝	18.68
Lloyds Eurofin 8 90 £	0¼	97¾	98¼	3/1	15⅝	16.09
LTCB Japan 5¼ 86	0¼	98⅛	98⅝	13/12	9⅝	9.78
LTCB Japan 5½ 89	0¼	98¼	98¾	7/12	10⅛	10.28
Mfrs. Han. O/S 5¾ 94	‡0¼	97	97½	31/8	9⅞	10.15
Midland Intl. Fin. 5 89	0¼	99	99½	20/12	9½	9.57
Midland Intl. Fin. 5¾ 92	0¼	98⅛	98⅞	5/12	10⅞	11.03
Nacional Fin. 6¼ 86	0¼	98	98½	25/7	14.69	14.95
Nat. West. 5¼ 94	§0¼	100	100½	11/10	18⅝	18.58
Nippon Credit 6½ 86	0⅛	97¼	97⅞	12/1	9.56	9.80
Nippon Credit 5¾ 87	‡0¼	97⅞	98⅜	6/8	14½	14.65
Royal Bk. Scot. 5¼ 94	§‡0¼	98	98½	11/10	9.31	9.49
Soc. C. de Bque. 6½ 87	0¼	100¼	100¾	3/10	20.06	19.96
Sogenal 5¾ 89	§0¼	97⅛	98½	13/1	9⅝	9.83
Standard Chart. 5¾ 90	0¼	100⅝	100⅞	6/9	17¼	17.14
Sweden 8⅛ 91	‡0¼	96½	97	18/10	18⅝	19.23
Williams & Glyn 5¼ 91	0¼	99⅞	100⅜	14/9	18½	18.48
Bq. E. d'Alg. 4¼ 89 SF	0⅝	†92	92½	18/12	6⅝	6.64

Average price changes... on day 0 on week 0

CONVERTIBLE BONDS	Cnv. date	Cnv. price	Bid	Offer	Chg. day	Prem
AGA Akt'bolag 7¾ 89	10/79	145	†120	121	0	−9.33
Ajinomoto 7¼ 95	2/80	615.5	114	115	+0⅞	−0.43
Alco Int. Fin. 9½ 94	1/80	40	93½	94½	+0¼	28.15
Apache I. Fin. 8¾ 95	12/80	21.12	†116¾	118	0	−1.33
Asahi Optical 7 94	11/79	526.1	97¼	98¼	−0¼	−2.41
Blocker Energy 8⅞ 95	1/81	21.87	98¼	99¾	0	14.27
Canon 6¾ 94	8/79	670	108⅛	108⅞	−0⅛	−0.57
Credit Suisse 4¾ 93	10/79	1278	106½	108	+1½	−2.44
Daiei Inc. 6½ 94	11/79	927.3	97¾	98¾	0	18.58
DDKK 11 90	4/80	324	109½	110½	−0¼	13.58
Dynalectron 9½ 95	8/80	12.22	112	113¾	+3¾	0.97
Enserch Fin. 9½ 94	7/80	30.25	127	128	+2½	−0.86
Meidensha Elec. 7 94	12/79	210	103½	104¼	0	8.16
Mitsubishi Cp. 6½ 94	10/79	549.1	122	123½	−0¼	4.18
Nippon Seiko 7¼ 94	12/79	339	†111¼	112½	−0½	0.23
Toshiba Cpn. 7¼ 94	10/79	198	101⅞	102⅞	0	−6.64
Union Bk. Switz. 5 89	2/80	121.4	98	99¼	+0⅛	5.35
Fujitsu 5 84 DM	7/79	475	100⅝	101⅛	+0⅛	4.70
Kansai Elec. 4 84 DM	4/79	1210	87¼	88¼	−0¼	37.30
Sharp Cpn. 6½ 88 DM	9/80	595	101½	102	0	14.27
Uny Co. 6½ 85 DM	11/79	1071	98	98¾	+0⅛	25.96

BONDTRADE INDEX AND YIELD

	Medium term		Long term	
July 18 ...	92.72	9.88	82.64	10.89
July 11 ...	93.01	9.78	83.18	10.79
High '80 ...	93.58	(18/6)	89.19	(2/1)
Low '80 ...	86.32	(2/4)	71.54	(29/2)

EUROBOND TURNOVER (nominal value in $m)

U.S. $ bonds	Cedel	Euroclear
Last week	793.4	3,583.7
Previous week ...	1,192.9	3,796.4
Other bonds		
Last week	348.2	471.3
Previous week ...	285.9	627.3

* No information available—previous day's price.

† Only one market maker supplied a price.

STRAIGHT BONDS: The yield is the yield to redemption of the mid-price; the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week = Change over price a week earlier.

FLOATING RATE NOTES: Denominated in dollars unless otherwise indicated. Coupon shown is minimum. C.dte = Date next coupon becomes effective. Spread = Margin above six-month offered rate (‡ three-month; § above mean rate) for U.S. dollars. C.cpn = The current coupon. C.yld = The current yield.

CONVERTIBLE BONDS: Denominated in dollars unless otherwise indicated. Chg. day = Change on day. Cnv. date = First date for conversion into shares. Cnv. price = Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem = Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

The list shows the 200 latest international bonds for which an adequate secondary market exists. The prices over the past week were supplied by: Arab Company for Trading Securities SAK; Kredietbank NV; Credit Commercial de France; Credit Lyonnais; Commerzbank AG; Deutsche Bank AG; Westdeutsche Landesbank Girozentrale; Banque Generale du Luxembourg SA; Banque Internationale Luxembourg; Kredietbank Luxembourg; Algemene Bank Nederland NV; Pierson, Heldring and Pierson; Credit Suisse/Swiss Credit Bank; Union Bank of Switzerland; Akroyd and Smithers; Bankers Trust International; Bondtrade: Credit Commercial de France (Secs.) London; Citicorp International Bank; Daiwa Europe NV; Deltec Trading Company; Dillon, Read Overseas Corporation; EBC; First Chicago; Goldman Sachs International Corporation; Hambros Bank; IBJ International; Kidder Peabody International; Merrill Lynch; Morgan Stanley International; Nesbitt Thomson; Orion Bank; Salomon Brothers International; Samuel Montagu and Co.; Scandinavian Bank; Strauss Turnbull and Co.; Sumitomo Finance International; S. G. Warburg and Co.; Wood Gundy.

Closing prices on July 18

WORLD STOCK MARKETS

NEW YORK

CANADA

HOLLAND

HONG KONG

JAPAN

ITALY

NORWAY

SWEDEN

SWITZERLAND

FRANCE

AUSTRALIA

AUSTRIA

BELGIUM/LUXEMBOURG

GERMANY

DENMARK

SINGAPORE

SOUTH AFRICA

BRAZIL

TEL AVIV

Financial Rand US$0.85 (Discount of 25%)

Spanish prices, Page 12

Indices

NEW YORK —DOW JONES

	July 18	July 17	July 16	July 15	July 14	July 11	1980 High	1980 Low	Since Cmpil't'n High	Since Cmpil't'n Low
◆ Industr'ls	922.23	915.10	904.44	901.54	905.55	891.15	925.38 (15/7)	759.13 (21/4)	1051.70 (11/1/73)	41.22 (2/7/32)
H'me B'nds	75.25	75.06	75.01	75.05	75.01	75.15	76.51 (25/5)	65.37 (22/5)	—	—
Transport	309.50	305.05	296.57	295.59	297.57	291.52	303.40 (16/7)	235.69 (27/3)	309.60 (15/7/80)	12.23 (8/7/32)
Utilities	114.23	114.68	114.57	114.06	114.62	114.66	115.66 (5/7)	95.04 (27/3)	165.32 (20/4/69)	10.52 (28/4/42)
TradingVol 000's	56,040	48,850	49,140	60,920	46,500	55,420	—	—	—	—

Day's high 950.80 low 914.42

	July 11	July 4	June 27	Year ago (approx)
Ind. div. yield %	5.95	5.94	5.99	6.78

STANDARD AND POORS

	July 18	July 17	July 16	July 15	July 14	July 11	1980 High	1980 Low	Since Cmpil't'n High	Since Cmpil't'n Low
‡Indust'ls	137.60	137.05	134.83	134.44	135.31	132.83	137.80 (18/7)	111.02 (27/7)	137.90 (18/7/80)	3.52 (30/6/32)
§Composite	122.04	121.44	119.55	115.30	120.01	117.84	122.04 (16/7)	98.22 (15/2)	125.55 (11/1/73)	4.40 (1/6/32)

	July 16	July 9	July 2	Year Ago (approx)
Ind. div. yield %	4.88	4.97	5.07	5.32
Ind. P/E Ratio	8.02	7.90	7.22	7.87
Long Gov. Bond Yield	10.08	10.11	10.13	8.92

N.Y.S.E. ALL COMMON

July 18	July 17	July 16	July 15	1980 High	1980 Low
69.84	69.53	68.54	63.35	69.84 (18/7)	55.30 (27/3)

Rises and Falls	July 18	July 17	July 15
Issues Traded	1,901	1,877	1,903
Rises	968	1,069	885
Falls	577	439	659
Unchanged	356	369	379
New Highs	—	124	72
New Lows	—	1	0

MONTREAL

	July 18	July 17	July 16	July 15	1980 High	1980 Low
Industrial	392.27	391.27	387.77	366.17	425.20 (29/2)	325.21 (27/3)
Combined	361.52	356.58	357.33	357.74	376.50 (29/2)	298.90 (27/3)
TORONTO Composite	2150.4	2133.9	2117.9	2115.0	2192.5 (26/2)	1702.5 (27/3)

	July 18	July 17	July 16	July 15	1980 High	1980 Low
AUSTRALIA						
Sydney All Ord. (1/1/53)	920.58	915.51	905.50	905.17	947.47 (14/2)	769.00 (2/1)
Metals & Mins (1/1/53)	5755.42	5720.95	5586.67	5616.64	6650.95 (14/2)	4581.26 (25/3)
AUSTRIA						
Credit Aktien (2/1/62)	66.98	66.66	66.87	66.96	69.40 (7/1)	66.85 (25/5)
BELGIUM						
Belgian SE (31/12/63)	94.54	94.57	94.85	94.57	105.75 (11/2)	90.14 (31/3)
DENMARK						
Copenhagen SE (1/1/73)	82.71	82.39	82.20	82.20	86.74 (2/1)	74.78 (5/3)
FRANCE						
CAC General (29/12/61)	106.90	107.4	107.5	107.6	115.2 (14/2)	97.1 (3/1)
Ind Tendance (29/12/72)	109.10	109.2	109.3	109.5	110.7 (6/7)	96.60 (6/1)
GERMANY						
FAZ-Aktien (31/12/58)	254.38	254.95	255.74	251.83	258.88 (25/2)	212.75 (28/3)
Commerzbank (Dec. 1953)	740.90	742.4	736.4	728.1	749.2 (25/2)	667.0 (27/3)
HOLLAND						
ANP-CBS General (1970)	86.7	85.9	85.3	85.0	87.0 (11/2)	74.8 (27/3)
ANP-CBS Indust. (1970)	65.6	64.7	64.0	63.5	68.2 (11/1)	58.2 (28/3)
HONG KONG						
Hang Seng Bank (31/7/64)	1050.64	1077.74	1053.89	1097.04	1104.56 (14/7)	738.9 (19/3)
ITALY						
Banca Comm. Ital. (1972)	102.56	102.32	102.37	101.91	107.74 (20/6)	83.11 (2/1)
JAPAN						
Dow Average (16/5/49)	6919.78	6810.41	6816.15	6795.37	6804.81 (25/4)	6475.95 (27/3)
Tokyo New SE (4/1/68)	470.02	469.10	469.15	468.61	475.53 (23/6)	449.01 (10/3)
NORWAY						
Oslo SE (1/1/72)	128.41	127.82	125.85	125.77	144.78 (14/2)	110.12 (28/6)
SINGAPORE						
Straits Times (1966)	564.16	561.28	557.05	560.22	564.58 (11/7)	429.75 (3/1)
SOUTH AFRICA						
Gold (1958)	734.5	733.3	711.8	698.6	748.5 (8/7)	649.5 (15/6)
Industrial (1958)	657.7	556.8	563.1	550.5	657.7 (18/7)	466.0 (28/1)
SPAIN						
Madrid SE (29/12/79)	102.84	102.80	103.22	105.68	105.60 (16/7)	96.76 (16/5)
SWEDEN						
Jacobson & P. (1/1/58)	376.22	376.65	376.09	374.47	388.88 (8/2)	354.72 (17/1)
SWITZERLAND						
Swiss Bank Co. (31/12/58)	307.7	307.2	304.8	303.6	317.9 (11/2)	284.6 (22/4)
WORLD						
Capital Intl. (1/1/70)	—	148.0	146.5	146.1	148.0 (18/7)	128.6 (27/3)

Base values of all indices are 100 except NYSE All Common—50; Standard and Poors—10; and Toronto—1,000: the last named based on 1975. † Excluding bonds. ‡ 400 industrials. § 400 industrials plus 40 Utilities, 40 Financials and 20 Transports. c Closed. u Unavailable.

NEW YORK ACTIVE STOCKS

Friday	Stocks traded	Closing price	Change on day		Stocks traded	Closing price	Change on day
Pan Am Air	737,100	5	+¼	St. Oil Ind.	473,000	63⅛	−¼
Pepsico	573,400	24½	−½	Gulf Oil	447,900	44⅝	−⅜
Colgate	571,900	15⅞	+¼	IBM	430,400	65⅞	−½
Storage Tec.	540,300	17	+1	Boeing	420,100	39⅝	+⅝
Texaco	435,200	37⅞	−½	Gt. West Financl.	410,200	23⅞	—

هكذا من الأصل

CONTRACTS AND TENDERS

SOCIALIST PEOPLE'S LIBYAN ARAB JAMAHIRIYA

SECRETARIAT OF LIGHT INDUSTRIES, POST BOX NO: 4388 TRIPOLI/SPLAJ
CABLE: TASNIALIBYA

PUBLIC TENDER

FOR PUBLIC TENDER NO: 1/80 FOR THE ESTABLISHMENT OF ONE ULTRA-MODERN FULLY AUTOMATIC PLANT FOR THE PRODUCTION OF INDUSTRIAL AND MEDICAL ALCOHOL, VINEGAR AND DRY BAKERY YEAST AT EL KHOMS / SPLAJ

The Tenders Commission of the Secretariat of Light Industries invites Public Tenders for the establishment of one ULTRA-MODERN fully automatic Plant for the production of Industrial and Medical ALCOHOL, VINEGAR AND DRY BAKERY YEAST at EL KHOMS / SPLAJ, in which specialised International companies with previous experience in the establishment of such works are invited to participate in accordance with the following conditions:—

1. The General Conditions booklet, the technical specifications and Tender Documents to be drawn from the Secretariat of Tenders Commission of the Secretariat of Light Industries, at its offices at Al Fateh St. during official working hours against a cost of (L.D. 100) One hundred Libyan Dinars non-recoverable.
2. Tenders shall be submitted on Tender Documents prepared by the Secretariat indicated in item (1) of this notice signed by the participants and shall be delivered in closed envelope sealed by seal wax which in turn shall be placed in another wax sealed envelope. The name and address of the Secretariat of Light Industries and the number of this Tender shall be written on the inner envelopes with an indication that they contain a Tender for the establishment of One ultra-modern fully automatic plant for the production of Industrial and Medical Alcohol, Vinegar and Dry Bakery Yeast at El Khoms.

   It shall be sent by registered mail, postage prepaid or shall be delivered by hand to the Secretary of the Tenders Commission of the Secretariat at Al Fateh St. (El Saat), Tripoli/Splaj, in the Secretariat's offices during official working hours. Such delivery shall be against a receipt to contain the name of Tenderer, and date and hour of delivery. However, in all cases, the Tenders shall be delivered not later than 12 o'clock noon of 1/10/1980.
3. The Tenderer shall enumerate in his Tender his previous experience in executing similar work and shall support such data by sufficient instruments and documents which should be attached to his Tender. Furthermore, he shall attach to his Tender all instruments, documents and licences permitting him to perform such work.
4. The Tender shall remain valid and binding to the Tenderer who may not withdraw it, as from date of its delivery by Tenderer and for a period of (120) one hundred and twenty days, which shall be calculated as from the last date indicated for acceptance of Tenders (opening of envelopes date), indicated in item (2) of this notice.
5. The Tenderer shall attach to the documents of his Tender a provisional guarantee amounting to not less than 2% (two percent) of the total cost of the Tender. Tenders not accompanied by a full provisional guarantee shall not be considered. Such guarantee shall not be considered. Such guarantee shall be either in cash paid to the Secretariat treasury or by an accepted cheque certified by the issuing Bank or by a letter of guarantee issued by a Local Bank. The said letter of guarantee shall not be subject to any reservation or condition and shall contain a stipulation as to its being irrevocable and that it is payable at the Secretariat's first demand irrespective of any contestation by the body who delivered it or any third party.

   The duration of effectiveness and validity of the said letter of guarantee shall continue for at least thirty days following the expiry of the period defined for the effectiveness of the Tender by which the Tenderer is bound.
6. The successful Tenderer shall deposit in the Secretariat's treasury within a period not exceeding (20) twenty days as from the date of notifying him of acceptance of his Tender, a final guarantee equivalent to 10% (ten percent) of the total cost for which the Contract is adjudicated.

   This guarantee shall be submitted in the same mode and procedures adopted for the provisional guarantee and in the manner defined in the General Conditions of this Tender.
7. Tenderers or their officially authorized representatives may attend the envelope opening session to hear reading of prices.
8. The provisions of the purchasing and contracting work regulation in use by the Secretariat shall apply to this Tender and to the Contract to be concluded with the Tenderer for whom the Tender adjudicated and with whom it shall be decided to conclude a Contract.
9. Tenders arriving after the defined time for opening of envelopes indicated in item (2) of this notice or which is not accompanied by a full guarantee fulfilling legal requirements shall not be considered.
10. The Secretariat has the right, according to its absolute discretion, to accept or reject any tender without indicating reasons.

TENDER COMMISSION
SECRETARIAT OF LIGHT INDUSTRIES

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

Prequalification to Tender for Completion of the Construction of Al-Mukalla Harbour

The Port of Aden Authority of the People's Democratic Republic of Yemen invites experienced contractors to apply to be qualified to submit Tenders for the completion of construction and maintenance of Al-Mukalla Harbour.
The works have been partially completed (about 25 per cent) by a contractor (now in liquidation) and taking over existing work (both permanent and temporary), equipment and materials will form part of the contract.

The whole of the works comprises, but is not necessarily limited to, the following:

—Taking over permanent and temporary works, equipment and materials provided by a contractor (now in liquidation) the legal ownership of which is entirely vested in the employer.

—Completion of the wave protection works of the harbour; two quay walls for the berthing of general cargo ships of up to 10,000 d.w.t., one 175 m. long and 10 m. depth of water, known as Berth No. 1, and the other 170 m. long and 10 m. depth of water, known as Berth No. 2; a shallow water quay 155 m. long for berthing fishing vessels up to 200 tonnes capacity, known as Fishing Quay; related dredging of quay wall trenches and the harbour basin; reclamation of the on-shore areas behind Berth No. 2 and the Fishing Quay; and outlets and ducts for various services to quays. In addition to the above the employer invites contractors to include in their Tenders for certain optional works identified in the Tender Documents.

—The works described are a part of the overall harbour works being or to be executed by others consequently time is of essence.

—Completion is required as follows:

Section 1.— 194 days—Fishing Quay and other related works.

Section 2.— 318 days—Civil works to area of fishmeal plant, waste water pump station, storage tanks and weighbridge (provisional works).

Completion—638 days—Total harbour works.

Contractors interested in submitting Tenders are invited to collect the Documentation for Prequalification from the offices of:

Yemen Ports Authority, Aden, People's Democratic Republic of Yemen, or

Dar Al-Handasah Consultants (Shair and Partners) UK Ltd.

91 New Cavendish Street, London, W1, United Kingdom

Telex: 27187 Darsah G Telephone: 01-637 8622

and return it in two copies, one to each of the above addresses, duly completed and signed not later than 30th August, 1980. Only contractors who have been qualified will receive an invitation to Tender.

INVITATION TO TENDER

SAUDI ARABIAN KINGDOM

A Saudi National Corporation invites FOREIGN INTERNATIONAL COMPANIES to submit their OFFERS at an earliest convenience, in respect of the following ITEMS supported with all statements and catalogues.

1) MARBLE FACTORY — Cutting & Polishing.
2) AUTOMATIC PLANT for Mosaic Tiles.
3) CEMENT BLOCKS FACTORY — Different shapes.
4) ELECTRIC POWERFUL GENERATORS — To run the above FACTORIES with special consideration of future expansion.

What is required for the above items is submission of offers along with office and residence compounds.

INFORMATION REQUIRED:

1) Production capacity of each factory.
2) Name of factory producer — brief literature as far as experience and reputation are concerned.
3) OFFERS should include cost of factory (delivery at site with installation).
4) Special offer to be submitted in respect of all FACTORIES maintenance.
5) Seperate offer for running the said factories (technically & administratively) with a statement of number & qualities of manpower required for each plant.

OFFERS should be sent to the following address:—

P.O. BOX 484
ABHA — Southern Region
SAUDI ARABIAN KINGDOM
TEL: 224 6277, 224 6306
TLX: 901019 SJ

"INTEREXPORT" OOUR Metali, oprema i inzenjering, 11000 Belgrade, Yugoslavia, Kolarceva 8, has pleasure in advising its customers:

NAFTAGAS—NAFTNA INDUSTRIJA SOUR—NOVI SAD
NAFTAGAS—GAS—RADNA ORGANIZACIJA TRANSPORTA, PRERADE, PRIMENE I PROMETA GASA, NOVI SAD, NARODNOG FRONTA 53,

of the following:

INTERNATIONAL INVITATION TO TENDER TO SUPPLY EQUIPMENT FOR GAS PIPELINES

The industrial organisation NAFTAGAS—"GAS"—Novi Sad, was given a loan in various currencies corresponding to US$59.4 million by the International Bank for Reconstruction and Development to cover the cost of the project known as the "Naftagas gas pipeline project" for the storage, distribution and transport of natural gas in Yugoslavia.
This loan is provided for payments resulting from the contract(s), for which this invitation to tender in open competition is published.
Companies and organisations, who have the qualifications, experience and reputation enabling them to supply the following material cif Yugoslavian port or free Yugoslavian border, are requested to submit tenders in this open competition for:

(a) Pipes of 1" to 28" ca. 430 km or 25,000 tons.
(b) Valves of 72" to 24".
(c) Fittings of 1" to 30".
(d) Equipment for gas pipeline from 2" to 24".
(e) Main measuring and control stations and consumer measuring and control stations.
(f) Insulating material.

The funds provided by the loan are to be used for corresponding payments ensuing from the contracts, which are signed as a result of this invitation to tender.
Suppliers of equipment from member countries of the International Bank and from Switzerland with a good business reputation and with at least 5 years' experience in the production and supply of this equipment, who are able to provide guarantees from well known banks or insurance companies, are requested to submit offers for items of equipment, which are the subject of the following tenders:

Number and Description of the tender	Price of the tender US$
1. Tender for pipes YU-916-IT-12.0019	1,500
2. Tender for valves YU-916-IT-12.0020	750
3. Tender for fittings YU-916-IT.12.0021	500
4. Tender for equipment for gas line YU-916-IT-12.0022	500
5. Tender for GMRS and MRSP-XU-916-IT 12.0023	1,000
6. Tender for insulating materiel YU-916-IT.12.0024	500

The tender documents for the International invitation to tender can be obtained from:

NAFTAGAS—GAS—RZ za investicije
Narodnog fronta 53
21000 Novi Sad Yugoslavia

on making the corresponding payment.
The payments are to be made out to Account No. 65700-620-219-[illegible]11/248 at the Vojvodjanska banka, Novi Sad, endorsed as follows: for the purchase of tender documents.
Those wishing to submit a tender from Yugoslavia can obtain the above tender documents on making the corresponding payments in dinar, which are to be made out to account No. 65700-607-000-885 at SDK—Novi Sad branch.
The payments will not be refunded.
The tender documents can be obtained during working hours from 20.6.1980 to 20.7.1980
Time limit for submitting an offer: 20.9.1980. The option to supply must not be less than 6 months from the date on which the tender is submitted.
Any further information can be obtained from Novi Sad, telephone number: 021/287-877, telex number 14-358 or Belgrade at "Butangas," RO za Promet, primenu i transport gasa sa N.sol.o. OOUR, Djure Djakovica 24 a, telephone 011/[illegible], telex 11-673.
Please send offers to the following address: "INTEREXPORT," OOUR Metali, oprema i inzenjering, YU-11000 Belgrade, Kolarceva 8, telephone number 629-322.

NIGERIAN PORTS AUTHORITY

TENDER FOR THE PURCHASE OF

(1) Pilot Cutters
(2) Harbour Launches
(3) Mooring Launches

EXTENSION OF CLOSING DATE

The closing date for the submission of tenders for the purchase of PILOT CUTTERS, HARBOUR LAUNCHES and MOORING LAUNCHES is hereby extended from July 15 1980, to August 1, 1980.

This tender was previously published as NPA Notice No. 3238 dated May 20, 1980.

J. E. KALU
Secretary to the Authority

NPA Notice No. 3245

Dated 14th July, 1980

PERUSAHAAN UMUM LISTRIK NEGARA
AGENCY OF THE MINISTRY OF MINES AND ENERGY OF THE GOVERNMENT OF THE REPUBLIC OF INDONESIA

INVITATION TO TENDER FOR

JAVA 500 KV TRANSMISSION SYSTEM

Sealed proposals covering supply delivery and erection of materials and equipment for 500 kV Overhead lines associated with the Java 500 kV Transmission System, will be received until 10.00 am Western Indonesia Standard Time, on 2nd December 1980 and publicly opened at 11.00 am on the same day at The Head Office of Perusahaan Umum Listrik Negara, Jalan Trunojoyo Blok M I/135 Kebayoran Baru, Jakarta — Indonesia.

The 500 kV Overhead lines consist of two lots:

Lot I : South Bandung — Cirebon (121 km long) one single circuit.
Lot II : Cirebon — Ungaran (235 km long) one single circuit.

Tenderers may propose one or all of the above complete lots.

All tenderers shall be subject to the condition that all proposed equipment and materials shall have their source and origin in countries which are associated with the International Bank for Reconstruction and Development and Switzerland.

In order that his proposal may be considered, Tenderers shall quote their experience in carrying out projects of a similar complexity and magnitude. In case of consortium, evidence of the experience of the separate members of the consortium shall also be provided, together with information on the experience of members working together. In particular, evidence of at least 5 years experience in the construction of bundle conductor transmission lines at voltages of 400 kV or above shall be provided and the lines should have been in successful operation at least for one year. Similarly, at least 5 years experience by the quoted suppliers of the manufacture and testing of towers, conductor and insulators of types similar to those proposed by the Tenderer shall be provided.

Tenderers must submit data with their proposals to establish their qualifications for performing the work. Proposal not accompanied by this data may be classified as irregular.

Prospective Tenderers may examine and obtain personally or through their representative copies of the specifications and documents from PLN after 23rd July 1980 and upon payment of Rp 375.000, which is not refundable, at:
PERUSAHAAN UMUM LISTRIK NEGARA, AGENCY OF THE MINISTRY OF MINES AND ENERGY, DIRECTORATE OF PLANNING, JALAN TRUNOJOYO BLOK M I/135, KEBAYORAN BARU, JAKARTA.

This project will be financed from the loan proceedings of International Bank of Reconstruction and Development under Loan No 1872 IND. PLN reserves the right to accept the proposal which, in its judgement, is the lowest responsive and best proposal submitted by a qualified Tenderer, to reject any and all proposals, and to waive irregularities and informalities in any proposal that is submitted. Proposals received after the specified time of closing will not be considered.

Further information regarding the above work can also be obtained from the Engineer, Merz and McLellan, Amberley, Killingworth, Newcastle upon Tyne NE12 0RS, England.

YEMEN ARAB REPUBLIC YEMEN GENERAL ELECTRICITY CORPORATION AL MUKHA POWER STATION

In September, 1980, tenders will be invited from major manufacturers for the design, supply and construction of a 150 MW oil and gas fired power station, to be built near the port of Al Mukha in the Yemen Arab Republic. Boiler/turbine generator units will be in the size range 30/40 MW. The contract will be placed on a complete turnkey basis, inclusive of all Civil Works. Tenderers will be asked to offer proposals for financing the project.

Pre-qualification of all Tenderers is a mandatory requirement. Any contractor who is interested in bidding for the above project and who can demonstrate proven ability and experience in the supply, installation and operation of a modern thermal power station in the size range similar to that under consideration, should apply, in writing, to Kennedy and Donkin, Consulting Engineers, Chatsworth House, 19, Lever Street, Manchester, M1 3LT, England, quoting reference YEM 058, not later than Monday, 11th August, 1980, for the pre-qualification questionnaire.

THE NIGERIAN PETROLEUM REFINING COMPANY

LIMITED

PORT HARCOURT, NIGERIA

The Nigerian Petroleum Refining Company Limited, Port Harcourt, Nigeria intends to carry out the refinery biennial overhaul in February 1981. Maintenance work will be scheduled for a maximum of 30 days depending on the final work-load.

The jobs to be done include:

1. Repair to flash zone and associated trays of 15ft. diameter fractionating column.
2. Plant and pipe-line modifications.
3. Repair to vessels.
4. Heater brickwork.
5. Heat exchanger tube bundle pulling, cleaning and refitting.

The Company will provide all materials and spare parts required, but the Contractor will be expected to provide all necessary machines, equipment and tools he requires for a successful execution of the work. Interested Contractors are invited to apply for the tender documents before 15th August 1980, either by writing to or by telexing:

THE SECRETARY,
NIGERIAN PETROLEUM REFINING COMPANY LIMITED,
P.O. BOX 585, PORT HARCOURT, RIVERS STATE,
NIGERIA. TELEX 61166.

SUDAN RAILWAYS

STORES DEPARTMENT

Contract No. 5251
SUPPLY OF ONE HEAVY DUTY HYDRAULIC PRESS FOR PRESSING WHEELS ON AXLES

Contract No. 5252
SUPPLY OF 2 (TWO) TYRE BORING MACHINES

Contract No. 5253
SUPPLY OF ONE GIBSON RING ROLLING MACHINE

NOTICE

(1) Controller of Stores, Sudan Railways, Atbara, invites tenders for the supply of one heavy duty hydraulic press for pressing wheels on axles; 2 (two) tyre boring machines and one Gibson ring rolling machine.

(2) Tenderers should quote for each tender separately and each tender should be put in a separate envelope.

(3) Details and specification for each tender can be obtained from the Office of Controller of Stores, P.O. Box 65, Atbara, or from Stores representative, Khartoum, tel: 74793 on submitting a written application bearing 50 piastres stamp duty and payment of £S3.000 for one copy of details and specification for Contract No. 5251, £S2.000 for one copy of details and specification for Contract No. 5252 and £S2.500 for one copy of details, specification and drawings for contract No. 5255.

(4) The closing date fixed for acceptance of tenders in this Office is Thursday, 28th August, 1980, at 12.00 hours noon.

OFFICE OF CONTROLLER OF STORES

SAAD/MMA.

SUDAN RAILWAYS

STORES DEPARTMENT

Contract No. 5264
SUPPLY OF 3 (THREE) 5 TONS ELECTRIC OVERHEAD CRANES

Contract No. 5265
SUPPLY OF 4 (FOUR) 10 TONS ELECTRIC OVERHEAD CRANES

Contract No. 5267
SUPPLY OF 2 (TWO) 20 TONS ELECTRIC OVERHEAD CRANES

NOTICE

(1) Controller of Stores, Sudan Railways, Atbara, invites tenders for the supply of 3 (three) 5 tons electric overhead cranes, 4 (four) 10 tons electric overhead cranes, and 2 (two) 20 tons electric overhead cranes.

(2) Tenderers should quote for each tender separately and each tender should be put in a separate envelope.

(3) Details and specification for each contract can be obtained from the Office of Controller of Stores, P.O. Box 65, Atbara, or from the Stores representative, Khartoum, tel 74793, on submitting a written application bearing 50 piastres stamp duty and payment of £S3.000, for one copy of details and specification for each contract.

(4) The closing date fixed for acceptance of tenders in this Office is Saturday; 30th August, 1980, at 12.00 hours noon.

OFFICE OF CONTRFOLLER OF STORES

SAAD/MMA.

CONTRACTS AND TENDERS

appears every Monday

Rate: £19 per single column centimetre (minimum three centimetres)

INTL. COMPANIES & FINANCE

Memorex goes into the red

By Our Financial Staff

MEMOREX CORPORATION, the U.S. computer equipment maker, reports a loss of $21.7m or $3.11 a share for the second quarter of 1980, compared with a net profit of $10.6m or $1.32 a share in the same period last year. Turnover was $185.7m, against $181.3m.

The company's loss for the first six months was $20.6m compared with net earnings of $22.3m or $2.79 a share in the same period of 1979. Sales in the first half rose to $370.6m from $359.2m.

Memorex said that in connection with decisions to phase out certain older products it established second quarter reserves of about $6m for expected writedowns of potentially excess inventory and related assets and for expected operating losses.

Additional inventory reserves of $3.5m were also established for adjustments of inventories *in excess of established requirements*, which are partially offset by a reduction in reserve requirements based on the recent results of physical inventory.

Setback for Borg Warner Australia

By Our Sydney Correspondent

RISING manufacturing costs and consolidation of earnings combined to reduce the earnings of the automotive parts maker, Borg Warner (Australia) in the June half-year. Profits of the group fell 2.3 per cent from A$3.7m to A$3.6m (U.S.$4.2m), despite a 19 per cent sales increase to A$84.55m (U.S.$99m).

The interim dividend, however, has been raised from 9 cents a share to 10 cents. The directors said that rising costs and the incorporation of the iron foundry into one plant had affected results.

SOUTH AFRICAN STEEL

Dunswart picks up pace

BY JIM JONES IN JOHANNESBURG

DUNSWART, THE once troubled South African iron and steel producer, is making a fast recovery, helped by strong domestic demand for steel. For the six months to June 30, the company reports an operating profit of R5.11m (US$6.7m), *compared with R3.19m for the* corresponding period of last year and with R8.61m for the whole of 1979.

While the directors do not put a figure on expected second half results, they are confident that the improvement will continue. The advance will be helped by a 14 per cent controlled domestic steel price increase granted on June 20.

Before a management reorganisation inaugurated a couple of years ago by the 46.6 per cent *controlling shareholder*, General Mining, Dunswart's plant had not been replaced to time. This adversely affected operations and earnings, and has necessitated a significant infusion of additional capital.

However, that renewal programme is now nearing completion and the management has concentrated on raising melt shop production to an annual 380,000 tonnes, allowing a sales increase to 243,000 tonnes of rolled sections and 70,000 tonnes of rolled billets.

The company has resumed payment of interim dividends and has declared an interim of 5 cents from first-half earnings of 39.6 cents per share. In 1979, a dividend of 10 cents was paid.

Mareeba discloses White deals

BY JAMES FORTH IN SYDNEY

MAREEBA MINING has disclosed that it purchased slightly more than 10 per cent of the capital of White Industries, the New South Wales Group, in a three-day share market contest *earlier this year which saw the* price of White shares spiral from A$8 to more than A$30 (U.S.$35). Mareeba in March had admitted to buying White shares, and had also said that it held 5.6 per cent of White's capital.

The difference of 4.67 per cent, or 440,024 White shares comes about because Mareeba sold the shares to the Japanese group Mitsubishi Development four days after it acquired them. At the time, Mitsubishi *was known to be buying White* shares at prices up to A$30 a share. But Mareeba sold the shares at its average purchase price of almost A$17 for the parcel. The disclosure means that Mareeba for a short period held slightly more than 10 per cent of White's capital.

White Holdings, the company formed by the White family, is offering A$20 a share and Endeavour Resources, a member of the group headed by Mr. Alan Bond, is offering A$21 a share, valuing White at almost A$200m (U.S.$230m). Mareeba would make a profit of between A$2.3m and A$3.1m if it sold. The directors of White Industries have issued their part B statement on the Endeavour bid, and said they had decided to make no recommendation.

Swan Brewery trust plea

BY OUR SYDNEY CORRESPONDENT

SWAN BREWERY Company has asked the Australian Government to extend to it a period of grace relating to its proposed, innovative, linked property trust. The Government has announced plans to deter companies from spinning off trusts to reduce company tax, by taxing the trusts at the prevailing company tax rate.

The full tax rate will not apply until the 1983-84 income year, however, for trusts established by July 11, to allow such groups to recoup costs.

Swan announced plans for its trust in mid-December, and obtained a written clearance at the time from the taxation office. The legal complexities had delayed the introduction of the trust. Swan directors, in a submission to Mr. John Howard, the Treasurer, said that considerable expenditure had been incurred tothe point where the scheme was about to be implemented.

The Swan directors have asked that the group receive the same treatment afforded to those companies whic hhave already established trusts.

SOCAL lifts spending plans

SAN FRANCISCO—Standard Oil Company of California (SOCAL) has increased its 1980 capital and exploratory spending programme to $3.4bn, from the $3bn programme it announced in April, and to a *level $800m above that planned* in January. The increases had been made possible, it said, by higher earnings and improved incentives for new investment.

About two-thirds of the $800m will be devoted to U.S. petroleum products, including the drilling of 20 per cent more wells than in 1979.

Reuter

PENDING DIVIDENDS

	Date	Announcement last year
AAH	July 23	Final 3.975
Aaronson Bros.	Aug. 7	Int. 1.2
*Acrow	July 29	Final 1.5
*Alexanders Discount	July 21	Int. 4.5
Ault and Wiborg	Aug. 8	Int. 0.75
Automotive Products	Aug. 9	Int. 1.5
*Bank Leumi (UK)	July 28	Int. 2.8
Barclays Bk.	July 26	Int. 8.25
*Bibby (J.)	Aug. 6	Int. 6.06
British Aluminium	Aug. 15	Int. 5.5
*Brown (John)	July 25	Final 10.239
Carrington Viyella	Aug. 15	Int. 0.7
*Cawoods	July 24	Final 4.46
*City Offices	July 29	Int. 1.3
*Commercial Union	Aug. 12	Int. 4.0
Corah	Aug. 16	Int. 1.25
*Crown Hse.	July 21	Final 2.5
*Davy Cpn.	July 24	Final 4.7
De Beers	Aug. 21	Int. 20c
Dixons Photo	Aug. 1	Final 2.795
*Dowty	July 22	Final 5.0
Estate Prop. Investment	Aug. 9	Final 2.75
*Fitch Lovell	July 31	Final 3.368
General Accident	Aug. 15	Int. 5.5
Glynwed	Aug. 8	Int. 2.45
Gold Fields SA	Aug. 17	Final 155c
Grindlays	July 31	Int 1.062
Heron Motor	July 17	Final 0.92
Hoffnung (S.)	Aug. 22	Final 3.007
*Hogg Robinson	July 22	Final 2.24
HK & Shanghai Bk.	Aug. 21	Int. HK$0.24
Hoover	Aug. 2	Int. 5.61
House of Fraser	Aug. 23	Int. 2.0
ICI	Aug. 23	Int. 12.0
*Inchcape	July 28	Final 10.0
*Initial Services	July 21	Final 4.0
Johnson Gp. Cleaners	Aug. 22	Int. 1.8
Letraset Intl.	July 26	Sec. int. 5.503
*Lex Service	July 31	Int. 2.8
London Brick	Aug. 22	Int. 1.734
*Midland Bk.	July 25	Int. 7.5
*NatWest	July 25	Int. 7.25
Nottingham Mnf.	July 30	Int. 1.0
Ocean Trans.	Aug. 21	Int. 4.095
Rentokil	Aug. 2	Int. 0.85
Securicor	Aug. 8	Int. 0.9
Security Services	Aug. 8	Int. 1.375
Shell Trans.	Aug. 1	Int. due
Smith Bros.	Aug. 7	Final 0.1
Smith and Nephew	Aug. 14	Int. 1.25
Taylor Woodrow	July 31	Int. 3.15
Transport Dev.	Aug. 18	Int. 1.45
Tricentrol	Aug. 2	Int. 2.8
*Tube Invs.	Aug. 6	12.5
UDT	Aug. 8	Final due
Vantona	July 31	Int. 3.0
Ward and Goldstone	Aug. 3	Final 4.092
Woolworth (F. W.)	Aug. 15	Int. 1.347

* Board meeting intimated. † Rights issue since made. ‡ Tax free. § Scrip issue since made. ¶ Forecast.

BASE LENDING RATES

A.B.N. Bank	16 %	■ Hambros Bank	16 %
Allied Irish Bank	16 %	■ Hill Samuel	§16 %
American Express Bk.	16 %	C. Hoare & Co.	†16 %
Amro Bank	16 %	Hongkong & Shanghai	16 %
Henry Ansbacher	16 %	Industrial Bk. of Scot.	17½%
A P Bank Ltd.	16 %	Keyser Ullmann	16 %
■ Arbuthnot Latham	16 %	Knowsley & Co. Ltd.	18 %
Associates Cap. Corp.	16 %	Langris Trust Ltd.	16 %
Banco de Bilbao	16 %	Lloyds Bank	16 %
Bank of Credit & Cmce.	16 %	Edward Manson & Co.	17 %
Bank of Cyprus	16 %	Midland Bank	16 %
Bank of N.S.W.	16 %	■ Samuel Montagu	16 %
Banque Belge Ltd.	16 %	■ Morgan Grenfell	16 %
Banque du Rhone et de la Tamise S.A.	16½%	National Westminster	16 %
Barclays Bank	16 %	Norwich General Trust	16 %
Bremar Holdings Ltd.	17 %	P. S. Refson & Co.	16 %
Brit. Bank of Mid. East	16 %	Rossminster	16 %
■ Brown Shipley	16 %	Ryl. Bk. Canada (Ldn.)	16 %
Canada Perm't Trust	17 %	Schlesinger Limited	16 %
Cayzer Ltd.	16 %	E. S. Schwab	16 %
Cedar Holdings	17 %	Security Trust Co. Ltd.	17 %
■ Charterhouse Japhet	16 %	Standard Chartered	16 %
Choulartons	17 %	Trade Dev. Bank	16 %
C. E. Coates	16 %	Trustee Savings Bank	16 %
Consolidated Credits	17 %	Twentieth Century Bk.	16 %
Co-operative Bank	*16 %	United Bank of Kuwait	16 %
Corinthian Secs.	16 %	Whiteaway Laidlaw	16½%
The Cyprus Popular Bk.	16 %	Williams & Glyn's	16 %
Duncan Lawrie	16 %	Wintrust Secs. Ltd.	16 %
Eagil Trust	16 %	Yorkshire Bank	16 %
E. T. Trust Limited	17 %		
First Nat. Fin. Corp.	19½%		
First Nat. Secs. Ltd.	19 %		
Robert Fraser	16 %		
Antony Gibbs	16 %		
Greyhound Guaranty	16 %		
Grindlays Bank	‡16 %		
■ Guinness Mahon	16 %		

■ Members of the Accepting Houses Committee.
* 7-day deposits 14%, 1-month deposits 14¼%.
† 7-day deposits on sums of £10,000 and under 14%, up to £25,000 14¼% and over £25,000 14½%.
‡ Call deposits over £1,000 14%.
§ Demand deposits 14½%.

Public Works Loan Board rates

Effective from July 12

Years	Quota loans repaid by EIP†	A‡	at maturity§	Non-quota loans A* repaid by EIP†	A‡	at maturity§
Up to 5	13	12¾	12¾	14	13¾	13½
Over 5, up to 10	12⅞	13⅛	13½	13⅞	13⅞	14
Over 10, up to 15	13¼	13½	13½	13⅞	14	14
Over 15, up to 25	13½	13½	13½	14	14	14
Over 25	13½	13½	13½	14	14	14

* Non-quota loans B are 1 per cent higher in each case than non-quota loans A. † Equal instalments of principal. ‡ Repayment by half-yearly annuity (fixed equal half-yearly payments to include principal and interest). § With half-yearly payment of interest only.

RECENT ISSUES

EQUITIES

Issue Price p	Amount Paid Up	Latest Renunc. Date	1980 High	1980 Low	Stock	Closing Price p	+ or –	Net Div.	Times Covered	Gross Yield	P/E Ratio
[illegible]	F.P.	—	100	85	Energy Capital (12½p)	[illegible]					
[illegible]	F.P.	[illegible]	90	74	Home Farm Prods10p	[illegible]					
[illegible]	F.P.	[illegible]	91	79	Oakwood Group	[illegible]					
[illegible]	F.P.	[illegible]	[illegible]	[illegible]	Outwich 10 Ffi	[illegible]					
[illegible]	F.P.	[illegible]	112	108	Rolfe & Nolan 10p	[illegible]					
[illegible]	F.P.	—	112	106	H.S.P.O. Minerals10p	[illegible]					

FIXED INTEREST STOCKS

Issue Price £	Amount Paid Up	Latest Renunc. Date	1980 High	1980 Low	Stock	Closing Price £	+ or –
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	British Home Stores 9% Cnv. Ln. '92	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Cowie (T.) 10½% Conv. Red. Cum. Pref.	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Dalai 8½% Conv. Bds. due 1995	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Folkestone & District Water 10pc Pref. '85	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	London & Midlandinds 8¼ pc Deb. '89-94	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	North Surrey Water 10pc Pref. 1986	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	South Staff. Water 9% Rd. Pf. '85	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Sunderland & S.Shields Wtr 9% Rd.Prf.1985	[illegible]	

"RIGHTS" OFFERS

Issue Price p	Amount Paid Up	Latest Renunc. Date	1980 High	1980 Low	Stock	Closing Price p	+ or –
[illegible]	Nil	[illegible]	[illegible]	[illegible]	Anderson Strathclyde	[illegible]	
[illegible]	Nil	[illegible]	[illegible]	[illegible]	Aurbury & Madeley	[illegible]	
[illegible]	Nil	[illegible]	[illegible]	[illegible]	Beresford (S. & W.)	[illegible]	
[illegible]	Nil	[illegible]	[illegible]	[illegible]	Brengreen	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Brown & Jackson	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Carless Capel	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Charterhall	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Clive Discount	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Elswick Hopper	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Greenwich Cable	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Grest, Nicholson	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Harrison & Crosfield	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Hazlewood Foods	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Land Securities	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Lloyds & Scottish	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Mallinson-Denny	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Panocontinental	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Thurgar Bardex	[illegible]	

Renunciation date usually last day for dealing free of stamp duty. *b* Figures based on prospectus estimate. *g* Assumed dividend and yield. *u* Forecast dividend: cover based on previous year's earnings. F Dividend and yield based on prospectus or other official estimates for 1979. Q Gross. T Figures assumed. ‡ Cover allows for conversion of shares not now ranking for dividend or ranking only for restricted dividends. § Placing price to public. pt Pence unless otherwise indicated. ¶ Issued by tender. ‖ Offered to holders of ordinary shares as a "rights." ** Issued by way of capitalisation. §§ Reintroduced. ¶¶ Issued in connection with reorganisation, merger or takeover. ‖‖ Introduction. □ Issued to former preference holders. ■ Allotment letters (or fully-paid). ● Provisional or partly-paid allotment letters. ★ With warrants. †† Unlisted security. ‡‡ Issued as units comprising 2 participating pref. shares and 1 ord. share at R3.50 per unit. + Dealings under special rule.

LOCAL AUTHORITY BOND TABLE

Authority (*telephone number in parentheses*)	Annual gross interest	Interest payable	Minimum sum	Life of bond
	%		£	Year
Knowsley (051 548 6555)	13¾	½-year	1,000	1
Redbridge (01-478 3020)	13	½-year	200	3/4
Redbridge (01-478 3020)	13½	½-year	200	5/6

CORAL INDEX: Close 496-501 (+2)

CURRENCIES, MONEY and GOLD

Nadir for the lira

BY COLIN MILLHAM

These are unhappy times for the Italian lira, with the currency firmly rooted to the bottom of the European Monetary System. High inflation has always been a problem, but the lira managed to live with this last year, against the background of a strong balance of payments position, and for a long period was the strongest currency within the EMS.

Inflation remains above 20 per cent, but it is the sharp deterioration in the balance of payments which has radically changed the picture. The overall *deficit in June of L783bn was a* slight improvement on the May shortfall of L849bn, but much worse than the situation last June, when the payments were in surplus and the lira was top of the EMS.

Italy's heavy dependence on imported oil has made a major contribution to the country's problems. The sharp rise in oil prices over the last year has been both inflationary, and led to the weakening of the trade position.

Speculation about a devaluation of the lira seems to *have abated since the economic* package from the Government at the beginning of this month. Since then the Italian currency has tended to stabilize, helped by a tightening of monetary policy, which in turn has led to an increase in commercial banks prime lending rates.

At this time of year banking liquidity is increased by the influx of tourists, while the situation has also been eased by the payment of Government disbursements, although a large auction of Treasury bills this month will tighten conditions.

Interest rates can be expected to remain high to support the lira, while the currency is also gaining some assistance from the relative weakness of both the dollar and the D-mark. Thanks to the decline in U.S. interest rates the lira has improved against the dollar since the beginning of July, and is also marginally firmer in terms of the D-mark.

The D-mark has been one of the weakest members of the EMS recently, and this has helped to keep the pressure low throughout the system, giving particular benefit to the beleaguered lira.

GOLD

	July 18		July 17	
Gold Bullion (fine ounce)				
Close	$607-610	(£255½-256¾)	$624-627	(£262-265½)
Opening	$615-616	(£259-260½)	$627-630	(£264-265½)
Morning fixing	$610	(£256.864)	$630.25	(£265.458)
Afternoon fixing	$606	(£255.082)	$627.25	(£263.861)
Gold Coins				
Krugerrand	$626½-628½	(£263¾-265¾)	$645-647	(£271-273)
Mapleleaf	$620½-624½	(£261¼-265¼)	$641-644	(£269¼-271¼)
New Sovereigns	$154½-155½	(£65-66)	$159-160	(£66½-67¾)
King Sovs.	$180-182	(£75½-76¾)	$183-165	(£76½-77½)
Victoria Sovs.	$180-182	(£75¾-76¾)	$183-185	(£76½-77½)
French 20s	$162-165		$167-170	
50 pesos Mexico	$747-752		$772-777	
100 Cor. Austria	$598-603		$615-620	
$20 Eagles	$733-738		$755-758	
$10 Eagles	—		—	
$5 Eagles	—		—	

OTHER CURRENCIES

July 18	£	$		£ Note Rates
Argentina Peso	4428-4448	1868-1875	Austria	29.15-29.45
Australia Dollar	2.0440-2.0480	0.8615-0.8630	Belgium	66.50-67.10
Brazil Cruzeiro	125.74-126.74	53.11-53.51	Denmark	12.76-12.86
Finland Markka	8.54½-8.55½	3.6000-3.6020	France	9.57-9.63
Greek Drachma	101.064-103.410	42.60-42.75	Germany	4.12½-4.15½
Hong Kong Dollar	11.65-11.66½	4.9075-4.9095	Italy	1935-1975
Iran Rial	n a	n a	Japan	520-525
Kuwait Dinar (KD)	0.630-0.636	0.2664-0.2665	Netherlands	4.50¾-4.53¾
Luxembourg Frc.	66.37-66.47	27.96-27.98	Norway	11.38-11.46
Malaysia Dollar	5.0800-5.0910	2.1400-2.1420	Portugal	112-115
New Zealand Dlr.	2.4010-2.4060	1.0120-1.0130	Spain	162¾-169¾
Saudi Arab. Riyal	7.85-7.91	3.3160-3.3195	Sweden	9.74-9.81
Singapore Dollar	5.0100-5.0310	2.1110-2.1130	Switzerland	3.80-3.85
Sth. African Rand	1.8130-1.8140	0.7635-0.7640	United States	2.369-2.379
U.A.E. Dirham	8.74-8.79	3.6880-3.6910	Yugoslavia	62¾-66½

Rate given for Argentina is free rate.

THE DOLLAR SPOT AND FORWARD

July 18	Day's spread	Close	One month	% p.a.	Three months	% p.a.
UK†	2.3720-2.3780	2.3740-2.3750	1.45-1.35c pm	7.07	3.75-3.65 pm	6.23
Ireland†	2.1520-2.1570	2.1550-2.1570	1.30-1.20c pm	6.96	3.60-3.50 pm	6.59
Canada	1.1510-1.1535	1.1530-1.1533	0.20-0.24c dis	−2.29	0.50-0.55dis	−1.82
Nethlnd.	1.9055-1.9080	1.9060-1.9070	0.20-0.30c dis	−1.57	0.45-0.55dis	−1.05
Belgium	27.92½-27.98	27.96-27.98	11-12½c dis	−5.04	25-27½ dis	−3.75
Denmark	5.3900-5.4030	5.3980-5.3995	3½-4ore dis	−8.33	11¾-12¼dis	−8.89
W. Ger.	1.7415-1.7485	1.7465-1.7475	0.06-0.02pf pm	0.27	0.15-0.10 pm	0.29
Portugal	48.66-48.86	48.76-48.86	30-40c dis	−8.60	70-110 dis	−7.37
Spain	71.00-71.15	71.05-71.15	80-100c dis	−15.19	220-255dis	−13.50
Italy	829.30-830.15	829.85-830.15	7-9lire dis	−11.57	25-28 dis	−12.77
Norway	4.8090-4.8120	4.8102-4.8112	0.1orepm-0.4dis	−0.37	0.75-1.25dis	−0.83
France	4.0480-4.0625	4.0600-4.0625	0.85-0.95c dis	−2.66	2.75-2.90dis	−2.78
Sweden	4.1145-4.1175	4.1150-4.1165	1.50-1.65ore dis	−4.59	5.25-5.40dis	−5.17
Japan	219.00-220.30	220.15-220.25	0.65-0.80y dis	−3.95	1.80-1.95dis	−3.40
Austria	12.36¾-12.38½	12.36½-12.37¾	1.40-2.00gro dis	−1.65	4.75-6.50dis	−1.82
Switz.	1.6020-1.6120	1.6105-1.6115	0.63-0.53c pm	4.51	1.60-1.55 pm	3.91

† UK and Ireland are quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency.

THE POUND SPOT AND FORWARD

July 18	Day's spread	Close	One month	% p.a.	Three months	% p.a.
U.S.	2.3720-2.3780	2.3740-2.3750	1.45-1.35c pm	7.07	3.75-3.65 pm	6.23
Canada	2.7310-2.7350	2.7360-2.7370	1.23-1.13c pm	5.17	3.15-3.05 pm	4.53
Nethlnd.	4.51½-4.55½	4.54-4.55	2⅞-1⅞c pm	6.27	6½-5½ pm	5.28
Belgium	66.20-66.50	66.37-66.47	17-7c pm	2.17	42-32 pm	2.23
Denmark	12.81-12.84	12.83-12.84	⅞-2⅞ore dis	−1.58	3-9½ dis	−2.73
Ireland	1.1005-1.1050	1.1013-1.1022	0.03p pm-par	0.16	0.17-0.10 pm	0.49
W. G.	4.13-4.16	4.14½-4.15½	3-2pf pm	7.23	7½-6½ pm	6.63
Portugal	115.40-115.90	115.60-115.80	3-30c dis	−1.71	15pm-85dis	−1.21
Spain	168.50-168.70	168.55-168.65	90-154c dis	−8.68	295-375 dis	−7.95
Italy	1963½-1973½	1972-1973	4½-6½lire dis	−3.50	28½-31½ dis	−6.08
Norway	11.41-11.45	11.41½-11.42½	7½-5½ore pm	6.96	16¼-14⅞ pm	5.45
France	9.60-9.64½	9.63-9.64	3¾-2½c pm	4.05	8¾-7¾ pm	3.42
Sweden	9.75-9.79	9.76½-9.77½	2½-1⅞ore pm	2.61	2½-2¼ pm	0.97
Japan	518-525	522½-523½	2.00-1.55y pm	4.09	4.60-4.25 pm	3.38
Austria	29.32-29.42	29.35-29.40	14-12gro pm	5.31	34-30 pm	4.36
Switz.	3.80-3.83½	3.82-3.83	4-3c pm	10.98	10½-9½ pm	10.06

Belgian rate is for convertible francs. Financial franc 66.90-67.00. Six-month forward dollar 5.40-5.30c pm. 12-month 7.47-7.37c pm.

FT LONDON INTERBANK FIXING (11.00 a.m. JULY 18)

3 month U.S. dollars		6 month U.S. dollars	
bid 9 1/4	offer 9 3/8	bid 9 1/2	offer 9 5/8

The fixing rates are the arithmetic means, rounded to the nearest one-sixteenth, of the bid and offered rates for $10m quoted by the market to five reference banks at 11 am each working day. The banks are National Westminster Bank, Bank of Tokyo, Deutsche Bank, Banque Nationale de Paris, and Morgan Guaranty Trust.

EURO-CURRENCY INTEREST RATES (Market Closing Rates)

July 18	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	West German Mark	French Franc	Italian Lira	Asian $	Japanese Yen
†Short term	17-17¼	8¾-9	10-12	10⅛-10⅜	2-2¼	8½-8⅞	11⅞-12⅛	14-17	[illegible]	11½-11¾
7 days' notice	16¾-17	8¾-9	10-12	10¼-10½	2-2½	8¼-8⅝	11⅞-12⅛	17¾-20¾	9-9⅛	12⅛-12⅜
Month	16⅝-16⅞	9⅛-9⅜	10⅞-11¼	[illegible]	5-5¼	[illegible]	11⅞-12⅛	21¼-22¼	[illegible]	12⅝-12⅞
Three months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Six months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
One Year	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Long-term Eurodollar two years [illegible] per cent; three years [illegible] per cent; four years [illegible] per cent; five years [illegible] per cent nominal closing rate. Short-term rates are call for sterling, U.S. dollars, Canadian dollars and Japanese yen; others two-days' notice. Asian rates are closing rates in Singapore. [illegible]

LONDON MONEY RATES

July 18 1980	Sterling Certificate of deposit	Interbank	Local Authority deposits	Local Auth. negotiable bonds	Finance House Deposits	Company Deposits	Discount market deposit	Treasury Bills ♦	Eligible Bank Bills ♦	Fine Trade Bills ♦
Overnight	—	[illegible]	—	—	—	[illegible]	[illegible]	—	—	—
2 days notice	—	—	[illegible]	—	—	—	—	—	—	—
7 days or	—	—	—	—	—	—	—	—	—	—
7 days notice	—	[illegible]	[illegible]	—	—	—	—	—	—	—
One month	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Two months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Three months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Six months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	[illegible]	[illegible]	[illegible]
Nine months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	—	—	—	—
One Year	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	—	—	—	—
Two years	—	—	—	[illegible]	—	—	—	—	—	—

Local authority and finance houses seven days' notice, others seven days' fixed. [illegible]

Finance Houses Base Rates (published by the Finance Houses Association) 17 per cent from July 1, 1980. Clearing Bank Deposit Rates for sums at seven day's notice 14 per cent. Clearing Bank Rates for lending 16 per cent. Treasury Bills: Average tender rates of discount 14.5219 per cent.

CURRENCY RATES

July 18	Bank rate %	Special Drawing Rights	European Currency Unit
Sterling	—	[illegible]	0.607779
U.S. $	11	[illegible]	1.44299
Canadian $	10.35	[illegible]	1.66117
Austria Sch.	6¾	[illegible]	17.8570
Belgian F	12	[illegible]	40.2774
Danish K	13	[illegible]	7.78998
D'mark	7½	[illegible]	2.51571
Guilder	9	[illegible]	2.75106
French Fr.	9½	[illegible]	5.84983
Lira	15	[illegible]	1197.68
Yen	9	[illegible]	316.549
Norwgn. Kr.	9	[illegible]	6.94232
Spanish Pts.	8	[illegible]	102.560
Swedish Kr.	10	[illegible]	5.93718
Swiss Fr.	3	[illegible]	2.31816

UNIT TRUST SERVICE

OFFSHORE & OVERSEAS—contd.

Henderson Admin. (Guernsey) Ltd.
7 New St., St. Peter Port, Guernsey 0481 26541/2
[illegible]

Rothschild Asset Management (C.I.)
P.O. Box 58, St. Julians Ct., Guernsey. 0481 26331
O.C. America Fd.† [illegible]
O.C.Sm. Co. [illegible]
O.C. Commodity* [illegible]
O.C. Dir. Comdty.† [illegible]
O.C. Hong Kg. Fd.† [illegible]
O.C. Sterling Fd.** [illegible]
*Prices on July 14. Next dealing July 31.

Henderson Baring Group; Hill-Samuel & Co. (Guernsey) Ltd.; Hill Samuel Invest. Mgmt. Intnl.; N.V. Interbeheer; International Pacific Inv. Mgmt. Ltd.; Jardine Fleming & Co. Ltd.; Leopold Joseph & Sons (Guernsey) Ltd.; Kemp-Gee Management Jersey Ltd.; Keyser Ullmann Ltd.; King & Shaxson Mngrs.; Kleinwort Benson Limited; Lazard Brothers & Co. (Jersey) Ltd.; Lloyds Bk. (C.I.) U/T Mgrs.; Lloyds Bank International, Geneva; Lloyds International Managers Ltd.; M & G Group; Management International Ltd.; Midland Bank Tst. Corp. (Jersey) Ltd.; Samuel Montagu Ldn. Agents; Murray, Johnstone (Inv. Adviser); Nat. Westminster Jersey Fd. Mgrs. Ltd.; Negit S.A.; N.E.L. International Ltd.; Pacific Basin Fund; Phoenix International; Providence Capital Life Ass. (C.I.); Quest Fund Mngmnt. (Jersey) Ltd.; RBC Investment Managers Limited; Richmond Life Ass. Ltd.; Rothschild Asset Mgt. (Bermuda); Save & Prosper International; Schroder Life Group; J. Henry Schroder Wagg & Co. Ltd.; Sentry Assurance International Ltd.; Singer & Friedlander Ldn. Agents; Standard Chartered Intl. Bd. Fd.; Stronghold Management Limited; Surinvest (Jersey) Ltd.; Surinvest Trust Managers Ltd.; TSB Unit Trust Managers (C.I.) Ltd.; TSB Gilt Fund Managers (C.I.) Ltd.; Tokyo Pacific Holdings N.V.; Tokyo Pacific Hldgs. (Seaboard) N.V.; Tyndall Group; Unilife Assurance (Overseas) Ltd.; Union-Investment-Gesellschaft mbH; Utd. Intnl. Mngmt. (C.I.) Ltd.; Van Cutsem & Associates Ltd.; S. G. Warburg & Co. Ltd.; Warburg Invest. Mngt. Jrsy. Ltd.; World Wide Growth Management; Wardley Investment Services Ltd.; Wren Commodity Trust

[illegible]

NOTES

[illegible]

هكذا من الأصل

FT UNIT TRUST INFORMATION SERVICE

AUTHORISED UNIT TRUSTS

Abbey Unit Tst. Mngrs. (a)
72-80, Gatehouse Rd., Aylesbury 0296 5941

Abbey Amer. Gth. Tst.	50.6	54.4	+0.8	1.84
Abbey Capital	40.7	44.0	+0.2	5.57
Abbey General	52.6	56.6xd	+0.1	5.56
Abbey Gilt & F.I. Tst.	114.0	120.0	+0.4	8.94
Abbey Income	48.8	52.8xd	-0.1	9.15
Abbey Intl. Bd. Tst.	95.5	101.1xd	-0.2	5.44
Abbey Inv. Tst. Fnd.	43.9	47.9	-0.1	5.37
Equitas Prog. Trust	79.0	85.4	+0.2	5.05

Allen Harvey & Ross Unit Tst. Mngrs.
45, Cornhill, London EC3V 3PB. 01-623 6314.

AHR Gilt & Pref.	92.7	97.5	.....	11.14

Allied Hambro Ltd. (a) (b)
Hambro Hse., Hutton, Brentwood, Essex.
01-588 2851 or Brentwood (0277) 211459

Balanced Funds				
Allied 1st.	87.0	93.1	+0.2	5.69
Brit. Inds. Fund	75.4	80.7	-0.5	6.44
Growth & Income	46.6	49.9xd	-0.1	5.57
Elect. & Ind. Dev.	43.0	46.0	+0.2	5.33
Allied Capital	89.0	95.2	+0.2	4.67
Hambro Fund	130.5	139.6	-0.1	6.44
Hambro Acc. Fund	165.3	176.9	+0.6	5.09
Income Funds				
High Yield Fd.	68.4	73.2	-0.5	9.77
High Income	77.0	82.4	-0.3	7.65
A. H. Eq. Inc.	43.8	46.9xd	-0.2	7.74
Govt. Secs.	26.5	27.2	+0.1	8.27
International Funds				
International	30.9	33.1	+0.3	3.26
Pacific Fund	51.0	54.6	+0.2	2.25
Secs. Of America	61.3	65.6	+0.7	2.74
Specialist Funds				
Smaller Co.'s Fd.	51.1	54.7xd	+0.1	4.66
2nd Smlr. Co's Fd.	60.2	64.4	+0.1	4.66
Recovery Sits.	125.9	134.7	-0.4	6.20
Met. Min. & C'dty.	63.6	68.1	-0.2	4.33
Overseas Earnings	65.1	69.7xd	+0.1	5.52
Exempt Funds				
Far East Exempt	57.4	59.7	+0.1	2.96

Confederation Funds Mgt. Ltd. (a)
50, Chancery Lane, WC2A 1HE. 01-242 0282

Growth Fund	65.9	69.3	.....	4.21

For Cosmopolitan see Chieftain Fund Managers.

Craigmount Unit Tst. Mgrs. Ltd.
40 Bucklersbury, London EC4N 8BD. 01-248 4984

High Income	38.3	41.5xd	-0.7	10.89
North American	49.2	53.2	-0.4	3.08
Canadian Exempt*	60.5	64.1	.....	5.80
Canadian Trust	57.9	62.5	+0.4	2.85
Mid Mount High Inc.*	50.8	53.5	.....	9.30
Recovery	57.5	61.5	+0.1	6.80
Gilt Trust	46.8	48.5	+0.5	11.33

*Weekly dealing day Wednesday.

Crescent Unit Tst. Mngrs. Ltd. (a)(g)
4 Melville Cres., Edinburgh 3 031-226 4931

Cres. Amer. Fd.	29.8	32.1	+0.5	1.17
Cres. Internat'l.	63.7	68.7	+0.3	2.55
Cres. High. Dist.	41.4	44.7	-0.1	10.815
Cres. Reserves	49.8	53.7	+0.1	5.59
Cres. Tokyo	20.7	22.4	-0.1	1.00

Dartington Unit Trust Mngt. Ltd.
Bridge Chambers, Barnstaple, Devon 0271 76324

Total Perf. Unit Tst.	23.7	25.1	.....	13.03

Discretionary Unit Fund Managers
Bilbao Hse., 36/38 New Broad St., EC2M 1NU. 01-638 4485

Disc. Inc. July 12	218.9	233.5	.....	5.48

E. F. Winchester Fund Mngt. Ltd.
44, Bloomsbury Square, WC1A 2RA 01-623 8893

Great Winchester	17.3	19.1	.....	7.48
Gt. Winchester O'seas	22.6	24.9xd	.....	4.42

Emson & Dudley Tst. Mngmnt. Ltd.
20 Albemarle St., W1. 01-493 3211

Emson Dudley Tst.	80.9	87.0	.....	6.00

Equity & Law Un. Tr. M.♥ (a)(b)(c)
Amersham Rd., High Wycombe. 0494 33377

Equity & Law	84.6	89.4	+0.3	4.79

Fidelity International Management Ltd.
62-63, Queen St., London, EC4R 1AD. 01-248 4891

American	25.3	27.3	+0.4	1.27
Fixed Interest	25.2	27.1xd	+0.1	12.63
Growth + Income	31.8	34.3	.....	7.22
Special Sits.	33.9	36.5	-0.1	2.04

James Finlay Unit Trust Mngt. Ltd.
10-14, West Nile Street, Glasgow. 041-204 1321

INSURANCE PROPERTY BONDS

OFFSHORE & OVERSEAS FUNDS

Continued on previous page

FT SHARE INFORMATION SERVICE

BRITISH FUNDS

"Shorts" (Lives up to Five Years)

[illegible]

Five to Fifteen Years

[illegible]

Over Fifteen Years

[illegible]

Undated

[illegible]

INTERNATIONAL BANK

[illegible]

CORPORATION LOANS

[illegible]

COMMONWEALTH AND AFRICAN LOANS

[illegible]

LOANS

Public Board and Ind.

[illegible]

Financial

[illegible]

FOREIGN BONDS & RAILS

[illegible]

AMERICANS

[illegible]

CANADIANS

[illegible]

BANKS AND HIRE PURCHASE

[illegible]

Hire Purchase, etc.

[illegible]

BEERS, WINES AND SPIRITS

[illegible]

BUILDING INDUSTRY, TIMBER AND ROADS

[illegible]

BUILDING INDUSTRY—Contd.

[illegible]

CHEMICALS, PLASTICS

[illegible]

DRAPERY AND STORES

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ELECTRICALS

[illegible]

ELECTRICALS—Continued

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ENGINEERING MACHINE TOOLS

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FOOD, GROCERIES, ETC.

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INDUSTRIALS (Miscel.)

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هكذا من الأصل

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INDUSTRIALS—Continued

INSURANCE—Continued

PROPERTY—Continued

INVESTMENT TRUSTS—Cont.

FINANCE, LAND—Continued

LEISURE

OIL AND GAS

MINES—Continued

Australian

Dividends Paid		Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's
—		Acmex 50c	22	—	—	—	—
—		ACM 20c	22	—	—	—	—
—		Bond Corp.	90	—	h02.8c	2.2	1.6
Nov.	Apr.	Bougainville 1 Kina	130	7.3	h026.2c	1.0	11.1
—		B H South 50c	200	9.79	♦	—	—
—		Canada Northwest	21	—	—	—	—
—		Carr Boyd 20c	31	—	—	—	—
—		Central Pacific	£32	—	—	—	—
Nov.	May	Conzinc Riotinto 50c	264	12.9	Q15c	2.1	2.9
—		Cultus Pacific N.L.	37	—	—	—	—
—		Eagle Corp. 10c	40	—	—	—	—
—		Endeavour 20c	23½	—	—	—	—

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Sri Lanka

Africa

MINES

Central Rand

Eastern Rand

Far West Rand

O.F.S.

Finance

Diamond and Platinum

Central African

Tins

Copper

Miscellaneous

Dividends Paid		Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's
—		Anglo-Dominion	150	—	—	—	—
—		Barymin	53	—	—	—	—
May		Burma Mines 10p	14	14.4	0.62	1.1	6.4
—		Colby Res. Corp.	157	—	—	—	—
Aug.	Feb.	Cons. Murch. 10c.	290	30.6	MQ100c	1.8	19.7
—		††Hemerdon 10c.	110	—	—	—	—
—		Northgate C$1	370	9.77	—	—	—
Jan.	July	R.T.Z.	475	12.5	15.0	3.2	4.5
—		Robert Mines	23	—	—	—	—
—		Sabina Inds. C$1	30	—	—	—	—
—		††SWCM 10p	44	—	—	—	—
—		Tara Exptn. $1	435	—	—	—	—

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. P/Es are calculated on "net" distribution basis, earnings per share being computed on profit after taxation and unrelieved ACT where applicable; bracketed figures indicate 10 per cent or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution; this compares gross dividend costs to profit after taxation, excluding exceptional profits/losses but including estimated extent of offsettable ACT. Yields are based on middle prices, are gross, adjusted to ACT of 30 per cent and allow for value of declared distribution and rights.

- ● "Tap Stock.
- * Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed.
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Tax-free to non-residents on application.
- ♦ Figures or report awaited.
- †† Unlisted security.
- # Price at time of suspension.
- ¶ Indicated dividend after pending scrip and/or rights issue: cover relates to previous dividends or forecasts.
- ♦ Merger bid or reorganisation in progress.
- ♣ Not comparable.
- ♦ Same interim: reduced final and/or reduced earnings indicated.
- § Forecast dividend; cover on earnings updated by latest interim statement.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- ★ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ♥ Excluding a final dividend declaration.
- ♣ Regional price.
- ‖ No par value.

§§ Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock. a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital; cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Tax free up to 30p in the £. w Yield allows for currency clause. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1979-80. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1980-81. K Figures based on prospectus or other official estimates for 1979-80. M Dividend and yield based on prospectus or other official estimates for 1980. N Dividend and yield based on prospectus or other official estimates for 1981. P Figures based on prospectus or other official estimates for 1980-81. Q Gross. T Figures assumed. Z Dividend total to date.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xR ex capital distribution.

REGIONAL MARKETS

The following is a selection of London quotations of shares previously listed only in regional markets. Prices of Irish issues, most of which are not officially listed in London, are as quoted on the Irish exchange.

Albany Inv. 20p	32	......	**IRISH**		
Bertam	36	......	Conv. 9% '80/82	£92	......
Bdg'wtr. Est. 50p	440	......	Nat. 9¾% 84/89	£80¾	......
Clover Croft	60	......	Fin. 13% 97/02	£96⅞	......
Craig & Rose £1	£10½	......	Alliance Gas	48	......
Fife Forge	32½	......	Arnott	390	+5
Finlay Pkg. 5p	18	......	Carroll (P.J.)	60	......
Graig Ship. £1	£16	+½	Clondalkin	125	......
Higsons Brew	77	......	Concrete Prods.	70	......
Holt (Jos) 25p	250	......	Heiton (Hldgs.)	32	......
I.O.M. Stm. £1	192	......	Ins. Corp.	258	......
Pearce (C. H.)	465	......	Irish Ropes	45	......
Peel Mills	44	......	Jacob	30	......
Sheff. Refrshmt	102½	......	T.M.G.	87	......
Sindall (Wm.)	143	......	Unidare	80	......

OPTIONS
3-month Call Rates

Industrials		I.C.I.	27	Utd. Drapery	6½
A. Brew	7	"Imps"	6½	Vickers	12
BOC Intl.	6	I.C.L.	14	Woolworths	5½
B.S.R.	4½	Inveresk	4		
Babcock	8	Ladbroke	15	**Property**	
Barclays Bank	34	Legal & Gen.	15	Brit. Land	7
Beecham	10	Lex Service	8	Cap. Counties	9
Blue Circle	25	Lloyds Bank	24	Land Secs.	28
Boots	16	"Lofs"	3½	MEPC	17
Bowaters	15	London Brick	6	Peachey	13
B.A.T.	20	Lucas Inds.	17	Samuel Props.	12
Brown (J.)	6	"Mams"	14	Town & City	2
Burton 'A'	10	Mrks. & Spncr	8		
Cadburys	5½	Midland Bank	26	**Oils**	
Courtaulds	8	N.E.I.	5		
Debenhams	8	Nat. West. Bank	27	Brit. Petroleum	32
Distillers	17	P & O Dfd.	10	Burmah Oil	20
Dunlop	7½	Plessey	14	Charterhall	10
Eagle Star	15	Racal Elect.	22	KCA	11
F.N.F.C.	2¾	R.H.M.	4½	Premier	13
Gen. Accident	21	Rank Org.	15	Shell	35
Gen. Electric	30	Reed Intl.	16	Tricentrol	40
Glaxo	18	Sears	5	Ultramar	35
Grand Met.	12	Tesco	6		
G.U.S. 'A'	34	Thorn	23	**Mines**	
Guardian	23	Trust Houses	12	Charter Cons.	14
G.K.N.	20	Tube Invest.	23	Cons. Gold	40
Hawker Sidd	15	Unilever	40	Lonrho	8
House of Fraser	15	U.D.T.	5½	Rio T. Zinc	25

"Recent Issues" and "Rights" Page 16

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FINANCIAL TIMES
Monday July 21 1980

Economy worry on Greek EEC entry

BY DAVID TONGE IN ATHENS

TWO REPORTS on Greece being completed by international organisations paint a sombre picture of the economy which will join the EEC in six months.

After years of growth higher than the Western average, and of low unemployment, Greece faces stagnation and a rising number of jobless, according to the Organisation for Economic Co-operation and Development, the grouping of 25 industrialised nations in Paris.

"Gross domestic product is expected to stagnate in 1980, with the year-on-year rate of inflation increasing a little to around 25 per cent, while due to the rise in oil prices the current balance-of-payments deficit may widen to $2.5bn," the OECD writes.

It makes clear that other factors apart from oil were responsible for deterioration on current account. "The current external deficit has become a constraint which threatens, unless the necessary structural changes take place, to reduce substantially Greece's medium-to-longer-run potential growth rate."

The report warns that Greece cannot respond to the challenges of entry to the EEC next year unless she tackles this deficit and gives urgent priority to increasing investment.

The second report, by the International Monetary Fund, states that the Greek Government has been "less effective than intended" at implementing policies aimed to tackle these problems.

It describes the Greek public-sector borrowing requirement as high, and criticises the Government for putting the main burden of credit restraint on the private sector. It calls for gradual abolition of the numerous administrative controls on the banking sector.

"In the longer run, we would expect that a free interest rate structure would be an important component in making the banking system more competitive and efficient."

The IMF report was prepared by a team which visited Athens for the regular annual consultations between the Fund and the Greek Government; Greek officials expect only minor amendments in the text given them.

The OECD report is more questing and comprehensive. It was drafted earlier this month, and virtually completed at a meeting last Thursday and Friday in Paris between Greece and OECD officials.

The report says that in 1979 agricultural output fell by 5 per cent, but a solid 5 per cent rise in non-agricultural output led to a 3.75 per cent increase in GDP.

This year, despite a 5 per cent *increase in agricultural* production, GDP is not expected to increase, and according to some expectations in Athens might even fall slightly.

For 1981 the OECD tentative forecast is that GDP could rise by 1 per cent (3.75).

Last year one of the most hopeful signs was a sharp recovery of manufacturing investment for the first time in five years. The level of this investment still remained 10 per cent below the 1974 peak.

For early 1980 limited data available suggest weakening of private investment. Public investment has also been under pressure. The OECD writes that the main brunt of the Government's restrictive policies is planned to be borne by public investment. It expects this investment to fall by about quarter in 1980.

The OECD finds that the rate of net profits after depreciation in manufacturing was too low to sustain a lasting recovery in manufacturing investment. It says that last year labour costs had a moderating effect on prices, with real earnings in the private sector falling significantly.

Between December 1979 and May this year the annual rate of inflation was 28.25 per cent. Even allowing for factors such as oil prices and phasing-out of some food subsidies, the rate is high enough to worry the OECD deeply.

The IMF report describes how the current account deficit adjusted to include deposits from convertible drachma accounts, rose to represent 5 per cent of GNP, compared with 2.9 per cent in 1978 and "was the most striking development in 1979."

The OECD finds that developments this year represent a deterioration in the underlying balance of payments position. The surplus from invisibles such as shipping, emigrants' remittances and tourism covers about two-thirds of the trade deficit against almost four-fifths in 1978. This year the trade deficit is expected to reach nearly $2.5bn.

After the heavy recent borrowing abroad the cost of servicing Greece's debt is expected to rise, it adds.

The OECD finds that "progress in reducing domestic imbalances may be rather limited this year." In 1981, the first year of EEC membership, inflation could be reduced below 20 per cent.

There is need for "a substantially smaller public sector deficit than at present, and a re-ordering of priorities between current and capital expenditure."

THE LEX COLUMN

Why U.S. banks look overseas

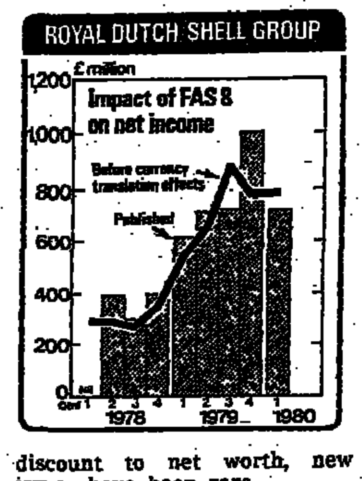
Midland Bank's bid for a controlling interest in the Crocker National Corporation centres on its proposal to recapitalise Crocker. After tendering for a stake of over 40 per cent at book value, Midland intends to inject nearly $500m into Crocker through the purchase of new shares at a substantial premium. This factor seems to have been crucial in gaining the approval of the Crocker board, and Midland must be hoping that it will make the bid acceptable to the various regulatory authorities.

In its last report and accounts, Crocker drew its shareholders' attention to an improvement in its capital ratios, pointing out that the equity/average total assets ratio had risen from 3.3 per cent to 4.1 per cent since 1974, at which level it compared favourably with the position of similar banks. But its expansionary instincts have clearly had to be held in check in order to preserve a high ratio, since it has been selling some of its loan book to other institutions in order to avoid too rapid growth of its balance sheet. It looks as though the margins Crocker is earning on its business are simply too slim to support the sort of growth in its loan portfolio that its marketing is capable of achieving without a weakening of the equity base relative to total assets.

American banks in general are not short of capital on a broad international comparison (except when compared with their counterparts in the UK and Switzerland). But their practice of not adjusting their bond portfolios to market value means that occasionally — earlier this year, for example — the book value of their equity is unrealistically high. And more seriously, the acceleration of inflation in the U.S. is requiring banks to sustain a more rapid rate of balance sheet expansion in nominal terms.

The obvious solution to a shortage of capital is a rights issue of new equity. In the U.S., however, share issues are generally placed through a syndicate, rather than being offered by way of rights to existing shareholders. Under this method, an offering of new shares at under book value dilutes the interest of the existing shareholders, and so U.S. banks are generally unwilling to issue equity at a discount. As most banks—with the exception of the fast-growing Sun Belt institutions—are valued by the stock market at a substantial discount to net worth, new issues have been rare.

ROYAL DUTCH SHELL GROUP



Crocker's shares were trading around $30 before bid rumours began to circulate, and this represented a discount of at least a third to book value. The bank would probably have been reluctant to issue shares around this level anyway: in addition, the Midland bid offers it an amount of new equity larger than the market capitalisation of its existing ordinary shares, a sum that it would not have been able to raise in any other way.

This does not mean that the bid will necessarily appeal to Crocker shareholders. The idea that bank shareholders can only be bought out at a premium to book value dies hard in the U.S., and although the new capital is clearly immensely valuable to the bank, it would be obtained at the expense of independence.

The general consensus among analysts is that Midland's earnings per share would not suffer any short-term dilution through taking in Crocker. Crocker's return on assets has been perfectly respectable, but U.S. banks have not been profitable enough to be able to afford the luxury of giving prominence, as the London clearers have recently done, to inflation-adjusted earnings.

For 1979, Crocker's net income (stripping out the profit on a major property sale) was $77m. Midland must be keenly aware that after a $58m adjustment to compensate for the loss of value of monetary working capital and around $7m of additional depreciation, the $30m dividend—even giving some allowance for a gearing adjustment—can have been barely covered.

Goodbye FAS 8

The battle to introduce an international standard on accounting for currency fluctuations comes to a head over the next few months. The UK standard setting body launched its Exposure Draft 27 in August and a closely similar document will be released in the U.S. during the following month. If all goes well an effectively common standard should emerge by the middle of next year, while Canada also plans to come into line.

The exposure draft is unlikely to spread many ripples of alarm in the UK. It is in line with the common practice of many UK companies in charging to profits only those exchange differences which reflect cash movements. Other differences are accounted for by means of movements in reserves. But for the U.S., the exposure draft will mark a complete change of approach from that prevailing under FAS 8 since 1975. Whatever the theoretical inadequacies of FAS 8, the underlying reason for the change is the weakness of the U.S. dollar and the high rates of U.S. inflation.

The "temporal" method embodied in FAS 8 has caused huge fluctuations in reported earnings, especially quarterly earnings, which bear no relation to underlying operating profits. A typical cause is the translation of fixed assets at historical rates and of foreign currency loans at current rates. The volatility of Shell's earnings under FAS 8 is notorious, while other companies which have had difficulties with the standard include Exxon, Sony and the French group Pechiney. The U.S. Treasury and the Federal Reserve have also become concerned at the standard, since many companies have incurred heavy money costs to rearrange their financial structure in order to limit a purely book-keeping exposure.

Nevertheless, there is still strong opposition from some U.S. companies against changing over to the UK-compatible system, with Du Pont and Caterpillar Tractor in the forefront. A key concern is that worldwide management financial control systems, based on dollar accounting, will have to be discarded if profits are to be measured in local currencies. A second consideration is the cost of unscrambling loan and other arrangements entered into to adapt to FAS 8.

There is now strong pressure developing for international harmonisation of accounting rules and while there will be a tussle in the U.S., the likelihood is that a common standard will emerge at the end of the day. Furthermore, such a step may herald further changes in the U.S., with the present block on revaluing fixed assets looking especially vulnerable.

Cheap U.S. chemical exports 'increasing'

By Sue Cameron, Chemicals Correspondent

EUROPEAN CHEMICAL companies claim that the U.S. is increasing its exports of cheap petrochemicals to the EEC in advance of possible anti-dumping regulations.

The European Council of Chemical Manufacturers' Federations (CEFIC) said at the weekend that U.S. imports appeared to have taken a growing share of Europe's styrene and vinyl acetate markets over the last few months—in spite of anti-dumping complaints against the U.S. over both products.

The European Commission has already announced an official anti-dumping investigation against the U.S. over styrene, while a similar announcement on vinyl acetate is expected this week. Both products are used to make plastics.

The increase in U.S. exports to Europe of these chemicals is almost certain to increase pressure on the European Commission for provisional anti-dumping duties.

CEFIC said that the share of the European free market—which excludes in-house sales between the various divisions of individual companies—held by U.S. styrene exporters had risen from 21 per cent last year to 25 per cent in the first three months of this year. It said there were now indications that it had risen "easily over 25 per cent" during the last three or four months.

Figures on European imports of vinyl acetate from the U.S. were not yet available for April to June of this year. CEFIC said. But it believed that U.S. producers were increasing their exports of vinyl acetate in much the same way as those of styrene.

"The indications we already *have pinpoint the need for swift* action." CEFIC said.

6,000 on short time at BL

BY ARTHUR SMITH, MIDLANDS CORRESPONDENT, AND PHILIP BASSET, LABOUR STAFF

BL CARS announced last night that 6,000 workers making Rover saloons and the TR7 sports model were to go on short time, possibly until Christmas.

In a separate move BL Cars has concluded a major procedural agreement with its white-collar unions which extends collective buoyancy in many cases for the first time to management staff.

News of short time cast further gloom over the troubled automotive industry, already hit by a sharp drop in sales of cars, commercial vehicles and tractors.

Many component suppliers are shedding labour. Redundancy plans have been announced by companies such as GKN, Wilmot Breeden, Renolds and Associated Engineering.

BL said Rover was suffering, like other manufacturers, from reduced demand for executive cars. About 4,000 at Solihull assembly plant, Birmingham, would work a four-day week at least until the end of September, and 2,000 at Pengam, Cardiff, supplying gearboxes for the Rover, would be affected.

BL Cars, which had short time in the spring to clear a backlog of stocks and ease cash flow problems, said last night that no other models were threatened.

BL Cars has increased its share of the home market to about 17 per cent from the record low of less than 14 per cent last month. But sales are very low as buyers await introduction of the "W" registration next month.

The procedural agreement on bargaining rights signed earlier this month will be followed by a similar one between covering Leyland Vehicles' management staff.

The BL Cars agreement is viewed by the signatory unions as a breakthrough on representation and bargaining rights for senior staff, who had only individual representation.

In particular some union officials are relieved that the agreement has been signed before the Government's Employment Bill becomes law, probably at the end of this month.

They believe that the agreement will help stave off the likelihood of an increased number of ballots of the staff, which they think likely to be urged by hawks in BL management after enactment of the Bill, with its great stress on increased use of ballots in industrial relations.

The agreement, for about 4,000 management staff, is separate from this year's delayed 5-10 per cent pay deal for the staff, which will be a joint negotiating committee which will handle pay negotiations for the group for this year's deal, due in November.

Job losses, Page 4

Councils to change accounting methods

By Robin Pauley

LOCAL AUTHORITY accountants have agreed to adopt commercial accounting standards and practices after a long dispute in the accountancy profession.

This means that comparisons between public sector and commercial accounts should be easier as the bases for compiling the figures will be more standardised.

Guidance notes which will go to local authorities at the end of the month will help to meet objections that councils are not required to give a "true and fair" account of their finances. They also represent a victory for the commercial accountants who have long argued the undesirability of having two separate sets of accounting standards and principles.

The commercial accounting bodies and the Chartered Institute of Public Finance and Accountancy have together been seeking common ground on the statements of standard accounting practice (SSAPs) for most of this year.

Mr. Noel Hepworth, director of CIPFA, said: "The main point, often clouded by argument about different accounting methods, is to ensure that local government is as efficient as possible."

The most important move is the acceptance by councils of the SSAP on the disclosure of accounting policies.

Crucial arms issue for Labour

BY ELINOR GOODMAN, LOBBY STAFF

THE LABOUR PARTY may adopt a policy of unilateral disarmament at its conference this autumn. It could also adopt a more hostile attitude to the Common Market, including a commitment at least to considering withdrawing altogether.

The two subjects, traditionally two of the most divisive issues in the party, look like dominating the debates on policy, as opposed to the constitution.

Resolutions submitted, published at the weekend, include an unprecedented number of resolutions opposing nuclear weapons.

The subject now seems certain to be debated in an atmosphere which may revive some of the bitter divisions over defence which split the party in the 1950s.

A policy of unilateral disarmament would be unacceptable to Mr. James Callaghan, the party Leader, and put Right-wing members of the Shadow Cabinet like Mr. William Rodgers even further out on a limb.

But indications are that Mr. Callaghan regards the priority

Rates reform and complaints about the way the water industry is organised dominate the list of resolutions submitted for this year's Conservative Party Conference. Proposals for rates reform are being discussed by Ministers. Feature, Page 11

this year as defeating the Left on the constitutional issues which have been the subject of such preoccupying argument since the General Election.

He might therefore not fight so hard on disarmament this *year in the belief that any such* move would be reversed once the party "came to its senses" and realised what it had done.

Mr. Callaghan's camp claims to be relatively confident that it will defeat the Left on the question of who should elect the party Leader and write the manifesto.

Divisions on the Left over the precise form of the proposed college to elect the Leader may well surface at the Executive this week.

Some Left-wingers are unhappy with the idea that the unions should be given the decisive say, as the motion before them on Wednesday will propose.

Even if Mr. Callaghan and his supporters succeed in heading off the proposal at this week's meeting of the Executive, Left-wingers are determined that it should be debated in some way at conference.

Weather

UK TODAY

SUNNY intervals, scattered showers. Cool.

London,
S.E., C.S. N.W., C.N. England,
E., W. Midlands, N. Wales

Scattered showers, sunny intervals. Max. 16C (63F).

E., N.E. England, E. Anglia,
N.W., S.W. Scotland

Showers, sunny intervals. Max. 15C (59F).

S.W. England, S. Wales

Mostly dry. Max. 17C (63F).

Borders, C. Highlands,
N.E. Scotland

Showers, sunny intervals. Max. 14C (57F).

Ulster

Mostly dry, sunny intervals. Max. 16C (61F).

Outlook: Rain spreading from *the West, sunny intervals, cool.*

WORLDWIDE

		Y'day midday °C	°F			Y'day midday °C	°F
Ajaccio	S	24	75	Lisbon	S	25	77
Algiers	S	28	82	Locarno	C	20	68
Amsdm.	R	15	59	London	R	13	55
Athens	S	30	86	Luxmbg.	R	15	59
Bahrain	S	39	102	Madrid	S	35	95
Barclna.	S	24	75	Majorca	S	28	82
Beirut	S	29	84	Malaga	S	28	82
Belfast	C	13	55	Malta	S	28	82
Belgrd.	S	29	84	M'chstr.	C	13	55
Berlin	C	21	70	Melbne.	R	11	52
Biarritz	C	21	70	Milan	C	23	73
Bmghm.	R	15	59	Mntreal.	C	24	76
Blackpl.	C	15	59	Moscow	C	18	64
Bordx.	C	18	64	Munich	R	22	72
Boulgn	C	15	59	Nairobi	S	23	73
Bristol	C	15	59	Naples	S	25	77
Brussels	R	17	63	Nwcstl.	C	12	54
Budpst.	F	27	81	N. York	S	33	92
B Aires	S	13	56	Nice	S	23	73
Cairo	S	34	93	Oporto	F	22	72
Cardiff	C	13	55	Oslo	R	16	61
Cas'b'ca	S	26	79	Paris	C	19	66
Cape T.	S	16	61	Perth	S	17	63
Chicago	S	33	92	Reykjvk.	F	11	52
Cologne	R	17	63	Rhodes	S	30	86
Cpnhgn.	C	17	63	Rio J'o	S	24	75
Corfu	S	29	84	Rome	F	26	79
Dublin	C	13	55	Salzbrg.	C	25	77
Dbrvnk.	S	26	79	Singapr.	C	29	84
Ednbgh.	C	13	55	Stckhm.	C	18	64
Faro	S	31	88	Strasbg.	C	18	64
Florence	S	26	79	Sydney	S	14	57
Frankft.	R	17	63	Tangier	S	34	93
Funchal	S	24	75	Tehran	S	31	88
Geneva	C	22	72	Tel Aviv	S	28	82
Gibrltr.	S	23	73	Tenerife	S	24	75
Glasgow	C	13	55	Tokyo	S	29	84
G'rnsey	C	12	54	Toronto	C	23	74
Helsinki	C	16	61	Tunis	S	32	90
Innsbrk.	C	22	72	Valencia	S	31	88
Invrnss.	F	13	55	Venice	F	24	75
Istanbul	F	28	82	Vienna	F	27	81
Jersey	R	11	52	Warsaw	C	22	72
Jo'burg	S	14	58	Zurich	C	21	70
L. Plms.	S	25	77				

C—Cloudy. F—Fair. Fg—Fog. R—Rain. S—Sunny. Sl—Sleet. Sn—Snow.

Continued from Page 1

Closed shops

He said: "I would very much like to see all existing closed shops subject themselves to a periodic review, and also to come within, as it were, the test of both the new legislation and the code of practice that we'll be drawing up. I think that would be a fair way."

The idea of subjecting existing closed shops to a test of support is precisely the kind of reform Conservative right-wingers were pressing for during the Bill's stormy passage through the Commons.

They are likely to be delighted if the proposal survives its consultation period, and might as a result be persuaded to take some of the heat off Mr. Prior as far as future legislation is concerned.

While the application of the new shop code is somewhat hazy, Mr. Prior hopes that both the codes and the forthcoming Act will influence industrial relations behaviour and practice.

Continued from Page 1

Strikes in Poland

situation there "could awaken concern among Poland's friends."

The Politburo appealed to the population to return to work. It promised that a Government commission would be set up to look into workers' grievances.

Since the start of July there have been more than 50 stoppages throughout Poland. They were originally provoked by the authorities' move to raise some meat prices.

But the authorities, aware that in 1970, when workers struck in protest against food-*price increases, an attempt to* use force led to the fall of the previous leadership, decided to negotiat ea return to work with shop-floor delegates this time.

For wage settlements arising out of the present wave of strikes Zloty 4bn have been set aside.

Index-linked gilts plan studied

BY ELINOR GOODMAN AND PETER RIDDELL

THE GOVERNMENT is reconsidering issuing index-linked gilt-edged stocks which would protect investors against inflation and offer a small real rate of return. A decision will probably not be taken until after the summer holidays.

Talks have been going on for some time between the Treasury and the Bank of England but the idea is now being more actively examined by Ministers. The discussion is mainly concerned with the practical implications for monetary management.

These questions will have to be faced before even experiment to test investor sentiment is considered. While such index-linked stocks would be primarily aimed at institutions such as pension funds, there might be a scheme for small savers.

There are known to be supporters in the Treasury for an extension of the present "granny bonds." At present retired people may buy index-linked National Savings Certificates worth up to £1,200 but these could be offered to everyone. This would be separate from the present save-as-you-earn index-linked scheme.

Sir Geoffrey Howe, the Chancellor, appears to have an open mind about the idea. At a recent meeting of the Conservative backbench finance committee he was non-committal, but did not appear to have ruled it out altogether. Supporters of the idea at Westminster have been encouraged to believe it may be tried.

The indications within Whitehall are that several major obstacles remain to getting such a radical new scheme off the ground. Even supporters of the idea concede that the odds are not yet in favour of change.

There is particular concern about whether an index-linked stock might represent an open invitation to foreign money to flood into London even more than recently. The oil-producing states are especially keen to find any inflation-proofed investment for their vast surpluses.

The Bank of England has been particularly cautious. It has said publicly that the question of issuing index-linked gilts should be considered not in isolation but in relation to its wider social and economic implications.

Mr. Eddie George, an assistant director of the Bank, told the Treasury and Civil Service Committee of the Commons this month that it was by no means clear indexed gilt-edged stocks would provide cheaper funding for the Government. It depended on the assumptions about the real rate of interest on indexed debt and returns on conventional debt as well as on the speed and extent of the fall in inflation. Such factors persuaded Mr. Denis Healey the former Chancellor, to turn down proposals for issuing indexed stock.

The idea may come up again today when Mr. Gordon Richardson, the Governor of the Bank of England, gives evidence to the Committee as part of its inquiry into monetary policy.

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